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THE ARCHITECTS'



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The Editor will be glad to receive MS. articles
and also illustrations of current architecture in this
country and abroad with a view to publication.
Though every care will be taken, the Editor cannot
hold himself responsible for material sent him.

THURSDAY, APRIL 28, 1938

NUMBER 2258 : VOLUME 87

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THE LATE SIR E. GUY DAWBER

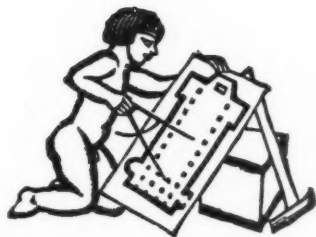


SIR E. Guy Dawber, R.A., PP.R.I.B.A., whose death occurred at his house in Hamilton Terrace, London, on Sunday. An appreciation by Mr. John Gloag appears on page 691.



G E N E V A

The viewpoint is the north tower of the Cathedral. In the foreground is the River Rhône, as it runs from Lac Léman; the new palace of the League of Nations can be seen on the wooded slope in the background.



6. POSSIBLE SOLUTION

THE public are beginning to resent profiteering in land; re-housing in twelve-to-the-acre congestion; and roads on which 6,540 were killed and 230,000 injured last year. They may not know the right solutions for these things, but they are beginning to favour attempts at large-scale solutions.

A profession's activities are divided into internal administration and expression of policy on national questions. In the second part architects have made poor showing since the war. On housing, slums, roads and trading estates architects collectively have done nothing save pass resolutions of goodwill.

The reason for this state of affairs has been the concentration of professional policy for thirty years on professional consolidation. This has been extremely necessary, but its result has been that the public never imagines that architects have, or could have, any interest in things like housing, industrial location and transport.

This has been very damaging to architects and will be more so. As the country becomes more democratic the architect as planner becomes far more socially significant than as individual artist in the decorative sense. To the average man architects seem far too narrowly bound up with preservation societies, art societies and other restrictive agencies. The best kind of professional propaganda would be for architects to show that they can undertake constructive study of the national questions in which planning plays a great part.

THE paragraphs above summarize the argument which the JOURNAL has tried to make convincing during the past weeks and in which it has emphasized what architects have missed through being, collectively, too narrow-minded. The next step is to consider whether architects can easily change their outlook. It is a difficult step.

Architecture and architects tend to be conservative. The average architect—we repeat, the *average* architect—realizing correctly that designing individual buildings on individual plots must always be the main part of his livelihood, has given little attention and no sympathy to any other aspects of architecture.

The slightly flattering, old-fashioned conception of an architect as an isolated artist somewhat apart from his fellow citizens has strengthened this narrow-mindedness. So that such collective energy as could be spared from professional consolidation has been confined to the artistic, technical and preservative by-roads of architecture.

The change now needed is, in a sentence, the concentration of part of the profession's collective energy on problems of land utilization. Nothing less.

Unreal, faddy, absurd though this may seem to a lot of architects, nothing else, in the JOURNAL's view, will

prevent the whole profession being brushed aside when constructive town planning begins to be put into operation. At present the architectural profession is sitting still while the public, coming gradually to a belief in the necessity of territorial planning, is walking past it, accompanied by a retinue of engineers, town planners, local authorities and miscellaneous officials.

The average architect may, grudgingly, admit the truth of all this and still deny either the competence of, or necessity for, architects to join in the chaos of economists, statisticians, engineers and evasive legislation which is now town planning. Bluntly, he may ask: "Are we architects, or not?"

The answer, in the JOURNAL's view, is that large-scale planning of land utilization will undoubtedly call for the highest degree of co-operation between many experts, but the resulting schemes will be none the less planning. On a more important scale they will be just as much solutions of problems and inspired compromises between conflicting requirements as large buildings are today. And they will require for their preparation men who, beginning as architects on a small scale, have enlarged their powers until they are capable of being architects on a grand scale.

But where, it will certainly be asked, is the organization, the training and finance to be found for providing such men and enabling them to carry out preliminary studies?

This is where the average architect may make a mistake. The machinery already exists, but the profession neither gives it encouragement nor—very largely—is aware of its existence. The School of Civic Design of Liverpool University, the Department of Town Planning at London University, and the better if somewhat ambitiously named School of Planning and Research for National Development of the Architectural Association in London already exist.

If the profession decides that it should subsidize (as subsidize by either work or cash it certainly must) the study of land utilization, it has no need with a sheet of paper and a dictionary. It can work through the schools which were largely established by those individual architects who realized that territorial planning was bound to come.



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NOTES & TOPICS

GUY DAWBER

I HAD not thought Sir Guy Dawber was 76. He looked so robustly permanent; and it was only in trying to recall when I last met him that I realized it must have been soon after his Presidency of the R.I.B.A.—which began 13 years ago.

The opportunities of Sir Guy's youth will not return. But while they existed, he was one of those—only about half-a-dozen in all—who used them very well.

The news of his death has probably made us all think for a little of the golden age of country house building, when architects—real architects—did little else. Or at least little else that mattered.

However much more democratic we are nowadays, one cannot help a twinge of envy of the men who had two or three country house jobs when the country was still country, and standardized equipment almost unknown. The country house by Sir Ernest George on which young Guy Dawber acted as Clerk of Works took about three years to build.

MR. MAUFE

A long overdue distinction was given last week to Mr. Edward Maufe, when he was elected to Associateship of the Royal Academy.

Mr. Maufe is so well known for his ecclesiastical buildings that the work he has carried out for the universities of Oxford and Cambridge is often overlooked. But on the day of the election announcement a drawing was published of his latest work, the extension to St. John's College, Cambridge.

The full scheme involves the demolition of part of Bridge Street and also (happily enough), of the Masters' Lodge.

St. John's is predominantly a brick college, and the new buildings are to be built of brick. They are set well back from the road to avoid the noise and vibration of passing traffic, and their gentle curves and sturdy outline fit snugly and compactly on a difficult site.

Cambridge has not been fortunate in her recent architecture. The new St. John's looks as though it will fall into the small and better group of Mr. Morley Horder's Jesus and Sir Giles Scott's Clare.

FALSE ALARM

It looks as though Cambridge in gaining a building was also about to lose one, for I saw last week that part of Queens' was slipping into the river.

There are those who thought that this might refer to the glistening new block on the Backs side; but it seems that it is the Fellows Building that is causing the trouble.

R.I.B.A. AND A.R.P.

The news that the R.I.B.A. is to be responsible for the training of architects for their particular part in air raid precautions is now, I see, official. At least it has been officially announced that the R.I.B.A. has submitted a scheme of training at the request of the Home Office. No dates have been fixed, for the scheme has not yet been accepted, but I gather that there will be an A.R.P. conference in London, with a series of lectures for those interested, probably followed by the same thing all over again in provincial centres if the various allied societies feel that it would be a good idea.

Now this column is hardly the place for a discussion of the merits and demerits of different precautions, but if architects are to be trained (and the Government has apparently decided that they shall be) it is obviously best for them to be trained by other architects, who will know something of the problems met with in everyday practice. Not by people who will talk merely in terms of splinter penetration and feet of concrete. I remember a certain lecture two summers ago—but perhaps you were there, too.

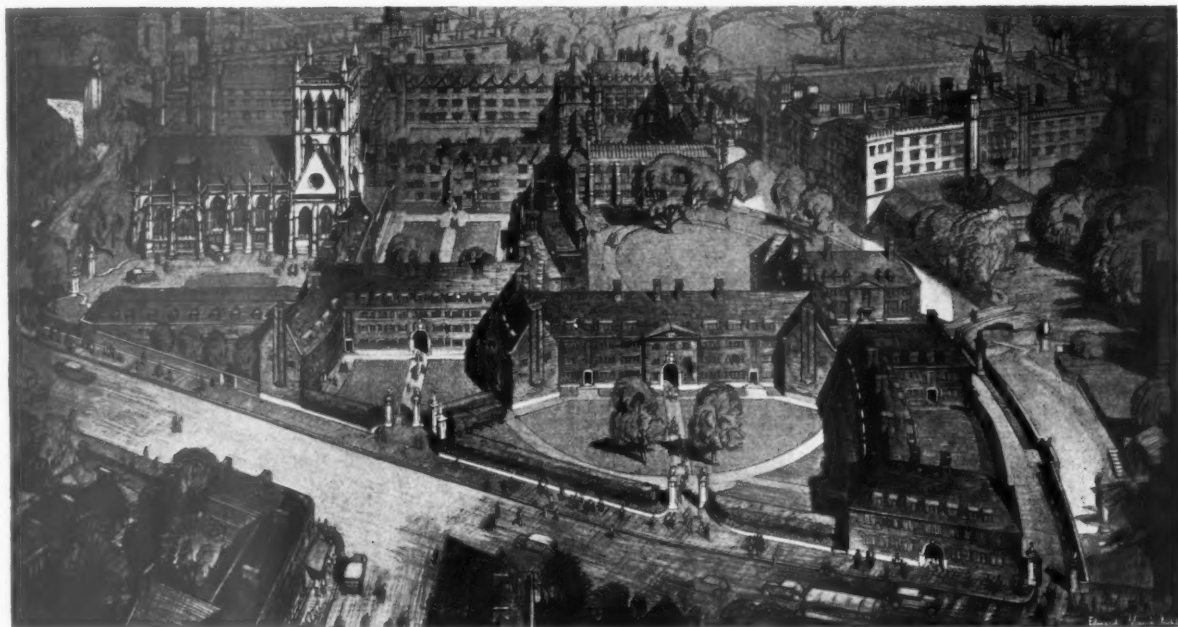
"THE TIMES" ON ANCIENT MONUMENTS

From the cushioned complacency of Printing House Square, *The Times* has issued a stern rebuke to Mr. Beverley Nichols for drawing attention to the vandalism which is destroying the nation's architectural treasures.

"Really, Mr. Nichols," says *The Times* (taking nearly a column to say it), "it isn't as bad as you think. The list of ancient monuments in the care of the Office of Works was increased by 324 entries during 1937—nearly a monument a day!"

I don't suppose the writer of the article bothered to read the list, but it would have been worth the trouble.

In Wiltshire, for instance, as Mr. Robert Byron recently pointed out, out of 243 entries, 204 consist of earthworks; six of prehistoric stones; five of barns; one of a white



Mr. Edward Maufe's scheme for new courts at St. John's College, Cambridge. The site is the west side of Bridge Street from St. John's Corner to the bridge, and the completion of the scheme will require the demolition of the existing shops in Bridge Street.

horse; one of a hall in Salisbury; and the rest of vestigial tracks and fragmentary fortifications.

*

Nor could the proportion be otherwise. Under the Ancient Monuments Act the Office of Works is entitled to preserve any building (1) not the property of the Church, or (2) uninhabited, i.e. in ruins. Further, the Royal Commission on Historical Monuments is forbidden to notice anything erected after 1714, the year when the greatest era of English architecture was just beginning.

*

Of these facts *The Times* must be well aware, and it does what I am sure it would call "grave disservice to the community" by such wilful avoiding of the issue.

"FAMOUS IS AS HANDSOME DOES"

There is, as they say, something about a Rolls-Royce. The feeling of reverence and covetousness which these cars cause in most of us may have a little snobbery mixed up in it—but only, I like to think, a little. The rest is admiration of a good thing.

*

Most of us have never cared very much for the stooping goddess of a radiator cap which is given away with the famous chassis, but with that our complaints ended.



Now I have one more. In the place of the "RR" panel (not very good in itself, but by now an old-established acquaintance) which used to head Rolls-Royce advertisements, the heraldic whirligig reproduced here has started to appear.

*

I view it with profound suspicion. Rolls-Royce cannot do this kind of thing. I accept with relief their assurances that it is not intended to put it on their car radiators.

RECESS

I spent Easter at Port Merion—in the strong Spring sunshine that fantastic composition of little coloured houses looked even more like a film set than usual: one of the reasons perhaps why members of the film and stage industry are such frequent guests here. They are a conservative lot—ill at ease when away from an atmosphere of make-believe.

*

The hotel is always being extended, and this year's work is the "Town Hall"—a medieval building transferred stone by stone from Cheshire and painted pink. The stone-mullioned windows light a lofty room, black-and-white-square floored, with a fine panel-vaulted ceiling. The whole building is crowned with a green copper cupola, which, upon close inspection, reveals itself as an inverted pig's-food boiler—and very gay and elegant it looks, too.

*

Mr. Clough Williams-Ellis was there in person, and his alert and dusty figure could be seen emerging from the undergrowth or silhouetted on a crag, in search, no doubt, of sites upon which to balance yet another conceit.

*

I would suggest that further development, if necessary, should be more scattered. The drive down to the hotel already threatens to take on the character of a street, and it would be a pity thus to destroy the present charming informality of mingled rocks and roofs.

ASTRAGAL

NEWS

POINTS FROM
THIS ISSUE

- Sir Charles Bressy's report on the London Traffic Problem will probably be published early next month* 690
- Conditions of a competition for a London police station are now available* 690
- Details of the R.I.B.A. Conference to be held at Bristol in June* 700
- "During 1937 attendances at R.I.B.A. Exhibitions totalled 282,000, an increase of 100,000 over 1936"* 700

NEW ASSOCIATE OF THE R.A.

Mr. Edward Maufe, M.A., F.R.I.B.A., has been elected Associate of the Royal Academy.

Mr. Maufe, who is 55 years of age, studied at the A.A. and was articled to Mr. William A. Pite. He is architect of the new Guildford Cathedral, which is now in course of construction. He has also designed a number of churches throughout the country.

The Governing Body of St. John's College, Cambridge, has recently adopted his plans for new buildings to provide additional accommodation in the College of 60 sets of rooms. A perspective of the scheme is reproduced on page 689.

LONDON HOUSING ESTIMATES FOR
1938-39

At Tuesday's meeting of the L.C.C. the Finance Committee asked the Council to vote £5,368,000 for capital expenditure on housing during the year ending March 31, 1939, while an additional sum of over £2,130,000 is included to cover expenditure on proposals which may be later approved. Total maintenance expenditure on housing, including debt charges (£3,052,000), is estimated at £5,784,000, but income of £5,150,000 is expected, including more than £4 millions from rents, etc.

The Housing and Public Health Committee stated that the total capital expenditure by the Council and its predecessors on housing operations up to March 31, 1938, amounted to over £57 millions and that the total number of houses and flats provided by the Council by that date was approximately £86,600, the population of these dwellings being about 385,000.

NEW SCHOOLS FOR BEXHILL

The Bexhill authorities, after considering the names submitted of a number of architects who have specialized in school work, have now appointed Messrs. Marshall and Tweedy to design two senior schools.

LONDON ROAD PLAN

Sir Charles Bressy's report on the needs in the way of new roads and road improvements in the London Traffic Area, on which he worked for three years and which is now in the hands of the Minister of Transport, is to be published early in May. There has been some delay in publication

THE
ARCHITECTS'
DIARY

Thursday, April 28

IDEAL HOME EXHIBITION. At Olympia. Until April 30. 10 a.m. to 10 p.m.

GARDEN CITIES AND TOWN PLANNING ASSOCIATION. At the Housing Centre, Suffolk Street, S.W.1. Exhibition of books on planning. Until May 21.

ROYAL COLLEGE OF ART. At 66 Portland Place, W.1. Exhibition by the School of Architecture of designs and drawings by Art Students. 6 p.m.

Friday, April 29

TOWN PLANNING INSTITUTE. At Carlton Hall, S.W.1. "Planning a Suburb." By P. T. Harrison. 6 p.m.

NATIONAL HOUSING AND TOWN PLANNING COUNCIL. At the Town Hall, Manchester. Annual Conference of Local Authorities in Lancashire and Cheshire.

Saturday, April 30

LONDON SOCIETY. Visit to the Old George Inn, Southwark. 2.30 p.m.

Monday, May 2

SOCIETY OF ENGINEERS. At Burlington House, W.1. "Modern Welding Practice." By Dr. T. Scott Glover. 6 p.m.

COLLEGE OF ARTS AND CRAFTS, Birmingham. At the Museum and Art Gallery. Exhibition of Students' Work. Until May 21.

Tuesday, May 3

EMPIRE EXHIBITION, GLASGOW. To be opened by H.M. the King at 10.30 a.m.

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C. "Housing in an Industrial City." By R. A. H. Lidett. 8.30 p.m.

HOUSING CENTRE, 13 Suffolk Street, S.W.1. Tuesday Luncheon: "Housing the Working Classes." By Alfred Bossom. 1 p.m.

C.P.R.E. At 66 Portland Place, W.1. Annual General Meeting. The Speaker will be Sir Philip Sassoon, M.P. 3 p.m.

due to the number and complication of the maps accompanying the report. Sir Edwin Lutyens, R.A., has advised on architectural aspects of the recommendations that Sir Charles makes.

Forecasts of the recommendations have included the creation of a system of boulevards and circular roads on the Parisian plan, the construction of tunnels and bridges under and over roads in the central area, and other large-scale undertakings. It is to be expected that road developments



Mr. Edward Maufe, M.A., F.R.I.B.A., who was elected an Associate of the Royal Academy last week. (Photo: Howard Coster)

for the next generation will be carried out on the lines now indicated by Sir Charles. Recently-completed roads in the London area are, in fact, the last evidences of the general plan laid down in John Burns's time and the new plan is designed for a similarly long term.

COMPETITION FOR POLICE
STATION

The Receiver for the Metropolitan Police District, New Scotland Yard, S.W.1, invites architects of British nationality resident in the United Kingdom to submit designs in competition for a new police station proposed to be erected on a site in Marylebone Road. The assessors are Mr. G. MacKenzie Trench, O.B.E., F.R.I.B.A., F.S.I., and Mr. S. Rowland Pierce, A.R.I.B.A. Premiums of £300, £200 and £100 are offered. The last day for submitting designs will be August 12, and questions must be received not later than June 1. Conditions are obtainable from Mr. A. T. Shepherd, Secretary, Receiver's Office, New Scotland Yard, London, S.W.1. (Deposit £1 is.)

COMPETITION FOR TWENTY
HOUSES

Architects of British nationality are invited to submit in open competition a development scheme for 20 houses in a prominent position on the Kingston By-Pass. The assessors are Messrs. Louis de Soissons, F.R.I.B.A., and C. H. James, A.R.A., F.R.I.B.A. (Acting with the above will be a member of the firm of Wates, Ltd., the promoters). The following premiums are offered: £75, £50 and £25. Subject to conditions the winning design will be adopted, and the winning architect will be paid in addition the R.I.B.A. scale fee up to £65. Last day for receiving entries, July 18. Last day for questions, June 4, 1938.

Conditions of the Competition may be obtained from the promoters, Messrs. Wates, Ltd., 1258-1260 London Road, Norbury, S.W.16.

BENGAL GOVERNMENT
APPOINTMENT

Mr. Francis W. Wright, M.A., A.R.I.B.A., of Sheffield, has been appointed Assistant Government Architect to the Government of Bengal.

NEW PRINCIPAL FOR DUNDEE
SCHOOL OF ARCHITECTURE

Mr. John Needham has been appointed Head of the School of Architecture in Dundee College of Art. Mr. Needham, who is 28 years of age, will take up his new appointment in September next. He is a graduate of the Leeds School of Architecture, Leeds College of Art, and has been a member of the teaching staff of that School for some years.

Mr. Needham had a brilliant student career and his successes include the winning of the Design Prize of the West Yorkshire Society of Architects and the Alfred Bossom Silver Medal. It will be remembered also that this year he was awarded both the Royal Institute's Alfred Bossom Gold Medal and Studentship for study in the United States and the Soane Medallion. He is at present travelling in America as the Bossom student.

C.P.R.E. BALL

A ball organized by the Council for the Preservation of Rural England is to be held at Grosvenor House, Park Lane, W.1, on

Wednesday, May 4, from 9 p.m. to 3 a.m. Tickets, price 25s. each (including dinner and supper), are obtainable from the Organizing Secretary, Miss Elizabeth Perry, 4 Hobart Place, S.W.1, or from members of the committee.

ELECTRICITY SHOWROOMS, REGENT STREET

In the description of the Electricity Showrooms in Regent Street, W.1, published in our last issue, we omitted to state that Messrs. York Shipley, Ltd., were responsible for the air-conditioning system. This system, all electric, was designed to fulfil the following requirements: heating, humidifying, cooling, drying, filtration and ventilation. The refrigeration is of the direct expansion type.

CORRECTION

Messrs. Riley Stoker, Ltd., ask us to state that the names of those responsible for the William Torbitt School, Aldborough Road, Ilford, illustrated in their advertisement on page xxxvi of our issue for April 14, were inadvertently omitted. The building was designed by Mr. L. E. J. Reynolds, M.INST.C.E., with Mr. J. F. Cavanagh, L.R.I.B.A., Senior Architectural Assistant for Schools. The Borough Electrical Engineer and Manager was Mr. G. F. Gregory, M.I.E.E.

ANNOUNCEMENT

Mr. J. Russell Baxter, A.R.I.B.A., 144 Alwyah, Baghdad, Iraq, would like to receive all kinds of manufacturers' catalogues.

THE LATE SIR E. GUY DAWBER

An Appreciation

BY JOHN GLOAG

SIR GUY DAWBER died on Sunday at his house in Hamilton Terrace, London, and those who knew him will find it difficult to believe that his age was seventy-six. His energy was almost youthful in its copiousness, and the time and patience he lavished upon public work would have left many younger men jaded and discouraged. But he lightened his burden of committee work by tackling it with a jovial zest; he was a firm but urbane chairman, who never wounded the self-love of the habitual chatter-boxes one finds on every committee, but never allowed them to waste time either.

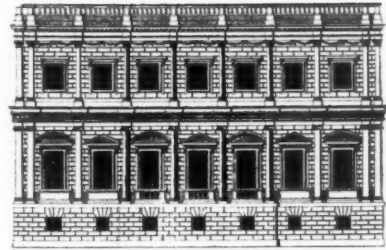
Both in his public work and in his architecture, Sir Guy expressed his deep love for England, and his understanding of English foibles. Although he shared with many of his generation the dread of industry that sprang from the teachings of Ruskin and Morris, it strengthened his sense of jealous guardianship for the rural beauties that remained outside the industrial areas. He was no escapist. He accepted the inevitable growth of industry; but he wanted it to grow with common sense, not merely with blind greed. To the proposition of securing in perpetuity rural sanctuaries, and to the building of dams that would restrain the

dark flood of industrial development, he dedicated most of his leisure; and through the Council for the Preservation of Rural England he was instrumental in retaining for the enjoyment of the nation many things of beauty.

Born in King's Lynn, Norfolk, he was educated there, and surrounded by examples of the work of Henry Bell, his eye was attuned to the bland rhythms of the English Renaissance before he completed his training at the Royal Academy Schools. All his life he retained his affection for Lynn, and he knew every street, every inflexion of those affluent façades in the square where the houses of the seventeenth-century merchants still stand, every detail of the exquisite Customs House. He was articled in Lynn, and then his profession took him to Dublin, where he devoted that tremendous energy of his to making detailed drawings in his spare time of Georgian buildings. Late in the 'eighties he paid a compulsory visit to Gloucestershire, for overwork had given him eyestrain, and he rested his eyes with a change of work. That began his discovery of the Cotswolds, and he amassed knowledge of local materials and building methods, and in due time began to enrich that part of the country with his own designs. He had a practice at Bourton-on-the-Hill, and among the houses he built in Gloucestershire are Burdocks, Fairford, Nether Ewell Manor, and Eyeford Park. Most of his work was domestic, and he built fine, spacious and unmistakably English houses up and down the country: Conkswell Grange and Hemptworth Lodge in Wiltshire; Stowell Hill in Somerset; Heath Lodge, Headley, and Tuesley Court in Surrey; Wiverton Hall in Norfolk; and one of his latest works was the Foord Almshouses at Rochester. His houses rise gracefully from the ground. Like woods and heaths and hills, they become part of the landscape; and this intimate association between buildings and countryside was created by Dawber's aptitude, improved by years of patient study, for appreciating local building traditions, plus a thoroughness in execution that lavished upon the smallest details an affectionate regard.

A few weeks ago he was showing me some examples of rural building he had collected for an essay on the subject, and in going through those photographs with him, I was impressed, not only by his staggering abundance of knowledge, but by the generosity of his criticism. Few architects can examine with detachment the work of their contemporaries and juniors, particularly when it is in their chosen field; but he could. But perhaps the key to his outlook lay in a gentle rebuke I once heard him administer upon an occasion when some commonplace prejudices about contemporary architecture were advanced. "We aren't here to exhibit our personal taste," he said; "but to judge what is good architecture and what isn't."

He was President of the R.I.B.A. from 1925 to 1927, and in 1928 was awarded the Royal Gold Medal of the Institute. He became an A.R.A. in 1927 and was elected a Royal Academician in 1935. He was knighted two years ago. Few architects have enjoyed a career so filled with happy work; few Englishmen have left their mark so widely and so agreeably upon their country; few men will be remembered with such sincere affection, for geniality and a high and purposeful intolerance of the things that mar English life form a rare and unforgettable combination.



REMINISCENCES

[By Harold Falkner]

PROFESSOR REILLY has been good enough to give us some of his reminiscences. May I give some of mine? It must be just over forty years ago that I first met C. H. Reilly, as he then was, red-headed, full of energy and ideas.

It was at Walter Crane's Kensington house, and after dinner we were going on to the Academy "soirée"; after which I lost the last train and walked some twenty miles home.

I remember the queer "medieval furniture." I have forgotten the dinner, it was probably drowned in talk.

Crane with his Charles I face (see Watts' portrait in the N.P.G.) and dreamy manner was then at the peak of his career, second only to Morris in the Arts and Crafts Socialist movement, with what was in those times (film stars and band-leaders had not arrived) the largest income of any artist of his time.

Crane had just got some kind of Government post at South Kensington (now R.C.A.), and Reilly had got or was getting Liverpool. I was invited because I was a joint pupil with Lionel Crane with Mr. (now Sir) Reginald Blomfield, who with Norman-Shaw and Jackson was a leader of the opposition to the R.I.B.A. and its policy.

The only schools at that time were the Academy School (evenings), the A.A. ditto, and a room at the Art Department, S.K., now R.C.A.

I may then have been a spectator at the inception of a movement which has led, for better or worse, to considerable developments, some of which are not completely understood by commentators of the present day, because (1) they were not born at the time; (2) because the history of these movements is either not written, or has been distorted by too enthusiastic protagonists of either side.

The ostensible rulers of the world of art and architecture, the R.A. and R.I.B.A. had then even less influence than now on their respective spheres, the latter particularly by its quarrel with Shaw, who, with his followers, had left it in a body (see pamphlet "Architecture: A Profession or an Art?").

The important movements of the time were: (1) the Art Workers' Guild, with

Morris as master, which was really rather catholic and embraced every craftsman of note and all the architects of any repute at that time, or perhaps I should say all those who considered architecture was an art, who *inter alia* enjoyed tolerably acute differences between themselves. The Arts and Crafts Society, and the Society for the Preservation of Ancient Buildings, were practically offshoots.

(2) The last remnant of the Gothic revival still going strong, Street, Sedding, Bodley, Henry Wilson; with whom might be included the remaining pre-Raphaelites, Burne-Jones, Ford-Madox-Browne, Paul Waterhouse, Byam Shaw, Alfred Gotch.

(3) A minor renaissance movement led by Norman Shaw, who by this time had deserted Romantic Gothic, James Bryden, Reg. Blomfield, Walter Cave, Horace Field and lesser lights.

(4) A few independents, each a law unto himself, C. F. A. Voysey, Mackintosh, Walton, Edgar Wood, the vernacularists Gimson and Charles Spooner, and so on.

I think practically all these were members of the A. W. G., which met at Clifford's Inn Hall (since regrettably destroyed), and held exhibitions, exchanged ideas, and argued, and even fought (to the great delight and subsequent imitation of their juniors).

Lutyens, Lorimer, and Baker (who was still in South Africa) were unknown, except to the more discerning, although each in their respective spheres had done some of their best work.

Architectural criticism was practically unknown; Ruskin was retired, Weaver was commercial travelling, the technical papers were terrible, the dailies had not discovered it, even in reports of official openings the architect could not hope to find his name unless he had a well-paid press agent. The most daring thing any paper would have said of any eminent architect was that Mr. So-and-so was not perhaps in this building seen at his best.

Whether the lack of architectural criticism was the cause or not who shall say, but the stuff these "eminent" gentlemen, or as was generally suspected, their assistants, turned out was truly awful, as Shaftesbury Avenue, the Imperial Institute road, or any municipal building 1890-1900, or the plates of any technical paper of the period will show. The mistake architectural critics of today make is in supposing that nobody knew it; everyone did; even the authors themselves, but they were the heads of flourishing "businesses" not to be lightly thrown away.

The cause of the secession from the Institute was the compulsory examination. The secessionists held that the term "architect" was one not to be lightly used, that it should only be conferred on one who had several approved works to his credit and that the proposal to give the designation to a person, who possibly had never done a

visible piece of work, good, bad or indifferent, was absurd.

So the secessionists left the main body and the R.I.B.A. carried on. The examination was established, and it became necessary to strengthen up the schools to produce examination fodder.

The A.A. became a day school founded by the main body; cynics said to provide them with assistants, but I take the more lenient view that it was a propitiation to the gods they had so villainously outraged. One thing they certainly did, knowingly or in ignorance, they threw away a very useful income in pupilage fees.

At the same time Liverpool, with local assistance (chiefly Leverhulme) was founded, and here we return to the Professor. The evils likely to be developed by the school system were well known at the time. France had had its Beaux Arts some hundred years, and with rare exceptions had never done any "architecture" since. It was perfectly well recognized that groups of students (schools) would be exceptionally likely to be liable to mob-psychology, to be easily swept away by fleeting fashion. It was realized that a large, even an overwhelming, preponderance of theoretical teaching, as was almost certain to be given in these schools, must result in turning out fledgling architects with few practical accomplishments; but certain events were not seen.

Take Liverpool. Professor Reilly has for the last thirty years been teaching architectural design, based on tradition, chiefly Classic, his own inclination exemplified by his own work being a rather "sublimated" Greek.

Now we must hark back to 1897 and its movements. The Art Workers' Guild and its subsection, the Arts and Crafts Society, had for its doctrine the super respect, shall we say worship, of craftsmanship with its motto "to use material aright." I always thought the "a" gave the show away: it was the gothic-revivalists' last kick, and perhaps the A.W.G.'s Achillean heel.

It was undoubtedly a very sound doctrine, the dependence of Design on Material the inspiring influence—Design with a big D and Material with a big M.

This was the thread that ran through all mediæval work, had been a good deal lost in the Renaissance, almost obliterated in Georgian times, and completely submerged in Victorian times, drowned in stucco and mechanical details.

It was the desire to get away from Victorianisms, the stuffy atmosphere of the "architect-and-surveyor" office, the drawing-office of the stock furniture maker—into the comparative seventh heaven of Henry Wilson's office or Ashbee's workshops. I am afraid Gimson's Cotswold paradise in the Cotswolds was not widely enough known or it would have been mobbed.

All the revivals were failing or had failed, perhaps through the lack of this

very understanding. Could it form the basis of a new outlook on all the Arts?

In England, it certainly didn't, perhaps because of its antagonism to commercial ideas; "achievement was to be sole reward," and there was consequently no reserve. The Arts and Crafts Society, I believe, still exists—the seed was well sown, it grew and flourished. At the last exhibition I saw it appeared to have gone back to seed, but on the Continent, particularly in Germany, Sweden and Holland, it grew steadily.

After the war it became a ruling factor, and, in due course, when it pleased Herr Hitler to export the non-Aryan architects from Germany, it returned to England, and was received by the new-born arch-journalist with open arms.

By the strange irony of circumstance (post-war economy) the principal available material in Germany had been concrete.

With this most uninspiring substance and steel (which in Britain was unnaturally cheap), and glass and chromium plate, and dyed aluminium, all "bright and attractive," allied to the new sanitarian craze, "light and still more light," the new Art, Functionalism, Modernism, caught on, particularly with the pseudo-scientific, the half-highbrow, and, of course, the schools.

Here was heaven-sent emancipation indeed. "Away with the orders, the styles, architectural history, the dusty museums, and let every boy or girl design from his own inner consciousness or temperamental inclination." I remember my old friend Professor Richardson came over to the A.A. one night on purpose to tell the A.A. to put them all, the "Chambers and the Adams in the dustbin." It is true the old apostate did soon recant; but so it was, and sober too.

And now to return to Charles Reilly. With the traditional generosity of the Briton the ex-German professors were eagerly welcomed (although re-export to America seems the present trend), and naturally professors gather together. In fact, unless one's name is Golly-woggy or something of that sort, publicity is almost impossible, and our Professor, after thirty years of training "in the tradition," tells his students, some 1,000 ex-students and the technical journals, that all that he said is "tripe," and his teaching "copyism." It is a great tribute to his persisting charm of personality that they don't seem to be a bit resentful or even to want their money back.

Wise man that he is, he goes the whole hog, for nothing is more popular than to lead the flock in the way it is already going, reaching the peak when he designated a kind of helical spring in reinforced concrete, "the building of the year" (1934 if I remember rightly).

And so we come to the present time, tendency seems to be halting, the ship is staggering in stays, people who have

sunk a good deal of money in "modernist" erections would be very glad, but probably unable, to get rid of them.

There recently appeared in *Country Life* (a paper which has been by no means antagonistic to "modernist" ideas) the following description of contemporary London by Evelyn Waugh:—

"Even in London, that noble deer bayed and brought down and torn in pieces; the city of lamentations, ruled by Lilliputians and exploited by Yahoos, whose splendid streets, once one of the splendours of Europe, are now fit only to serve as the promenades of pet dogs or as vast ash-trays for the stubs of a million typists—even in London, in by-ways and neglected places, a few buildings precariously survive in grace and decency."

Allowing for that slight tendency to over-statement, to counteract the over-statements of the other side, this is a fairly true picture.

Hardly a street or square in the W.1 district is without some grievous loss replaced by an example of at least architectural bad manners.

The Adelphi has gone, and with it valuable public rights. Waterloo Bridge, its approaches and its relation to Somerset House, to be replaced by something co-related with Brettenham House and Shell Mex building, and though it is unlikely that such atrocities as the B.B.C. and *Daily Express* buildings will be repeated, there is nothing to prevent the repetition of "The Odeon," Leicester Square.

It is perhaps amusing, it is undoubtedly good business from the tech-press point of view, it may be encouraging to the young of the species, to tell them that what their predecessors have done for the past fifty years is tripe and copyism, but is it wise to let it spread to the man-in-the-street?

To tell him "everything we have said in the past is wrong" is not to convince him that what you are saying now is inspired truth.

Anyway, the proportion of building done under architectural supervision now is less than it has been at any period during the last fifty years. This is of course more evident in the country than it is in town, where by reason of the greater complexity of building conditions some kind of control is imperative, but even in London it would be difficult to find a building where association with the financial directorate is not more important than acknowledged merit, or is there such a thing as "acknowledged merit"?

It takes several years, and at least half-a-million of money, to build up a film star; it takes twenty-five years or two generations and a well-paid press-agent to build up an architect's reputation.

The strength of the profession is the hold of its leaders on the public; is it wise to shake this feeble consciousness?



One of the municipal blocks of flats built in Paddington since the war.

PLEA FOR THE APPOINTMENT OF AN ARCHITECT FOR PADDINGTON'S NEW HOUSING SCHEME

[By A Ratepayer]

"I should say at once that Mr. Boast's duties as Borough Engineer covered so wide a range of matters as to make it impossible for him to give detailed personal attention to the highly important subject of water supply. He was responsible for highways, lighting, drainage, housing and many other matters."—From the report of the Public Inquiry at Croydon following the outbreak of typhoid.

IN view of the Croydon Inquiry it seems hardly the moment to enlarge the duties of borough engineers, yet it is only too evident that local authorities are disregarding the warning. Here is a case in point.

The Paddington Borough Council is purchasing twelve acres of the Clarendon Street district for the purpose of redevelopment under the terms of the 1936 Housing Act. The sum of £600,000 is to be spent upon the scheme and some thousands of persons are to be rehoused. The block plans are shortly to be sent to the Minister of Health for his approval and will be signed by the Borough Engineer.

In the initial stages of the scheme the Borough Council decided that this expensive and important project did not require the employment of a special architect but could be carried out by the Council's own staff under the

control of the Council's permanent officer, the Borough Engineer, with whom are working architectural assistants not directly responsible to the Council.

This proposal of the Council has been the subject of much controversy, and efforts are being made to obtain the appointment of an architect to design and supervise the erection of the scheme before it is too late. In a letter to *The Times* on April 5, over the following signatures—Violet Bonham Carter, Brendan Bracken, Celia Coates, Leonard T. E. Dent, Barbara Bliss (Hon. Secretary, Paddington Housing Council), criticism of the appointment was given as follows:

Acres of workers' dwellings are being constructed by officials untrained in matters of planning and architectural design, and it is probable that these buildings may be lived in for 100 years. The architectural profession now has an accumulation of knowledge and experience appropriate to just this problem; and, moreover, there is ample evidence that the expense of architects' fees is more than saved by the efficient administration of the building contracts.

Our immediate concern in this letter is to draw attention to the scheme initiated by the Paddington Borough Council to re-develop 12 acres of an important working-class district. This scheme, one of the biggest of its kind in London, is to cost over £500,000 and may, for other reasons, perhaps be regarded as a test case for the rest of the country of schemes prepared under the 1936 Act. The plans have been entrusted to the borough engineer's department; the architectural assistants are working in a subordinate capacity to the borough engineer and are not directly responsible to the Council.

Why should this district be exposed to the risk of having imposed upon it an imperfect and ill-conceived plan? The new buildings of our generation should not perpetuate the old faults of design and inflict on the housewives and children of the next 100 years ill-health and inconvenience.

Nothing is more important to the community than the good health and well-being of working people, and it is surely indefensible that they should be denied the available expert skill.

Another letter to *The Times*, signed by the Secretary of the Housing Centre, also called for the employment of highly-skilled architects to supervise housing schemes now in the hands of borough engineers. Extracts are given below:

Under the Housing Act, 1935, local authorities were empowered to clear and replan exceptionally big working-class areas. These "Re-development Areas" may extend to as much as 65 or more acres. It is almost inconceivable that such schemes, which provide the necessary link between rehousing and urban replanning, should be allowed to remain under the control of borough departments supervised by an engineer or surveyor whose hands are already full with manifold other duties.

The Paddington Redevelopment Area provides a case in point, but the great majority of other boroughs still entrust their housing schemes to their surveyor or engineer, and any one of these boroughs is empowered to declare a Redevelopment Area similar to the one under review. Surely, therefore, the time has come to insist that local authority housing should receive the attention of highly-skilled architects directing or closely co-operating with properly staffed departments occupied solely with housing.

This organization is concerned only with the promotion of a higher standard of housing in this country, and is representative of no trade or professional interest. In appealing to the

Government to insist on the employment of fully qualified architects, we hope to ensure that in the future the right men will be appointed to do the right work.

It is obvious from the above statements that the authors consider that every effort should be made to prevent "the risk of an imperfect and ill-conceived plan" being carried out in Paddington. There are within the borough three small blocks of working-class flats which have already been built by the engineering department and evidently these do not inspire confidence. Moreover, a scheme of this magnitude demands the guidance of an architect familiar with the many problems confronting the execution of a large and intricate rehousing scheme, and the letters have come at a time when it is still possible for the Council to reconsider its attitude towards the problem.

Much of the Clarendon Street area of Paddington is insanitary. But there is beauty of architecture in its century-old

houses; it is a sociable home-like place with a character of its own, and it is liked by the people who live there. It will take an architect of genius to give back to this important community, in architectural form, the surroundings which will be as enjoyable as their present homes and at the same time ensure to them cleanliness and health.

This is no reflection on the Borough Engineer's department, as the scheme would obviously test the skill of our finest architect, because it is the job of a specialist in this branch of design. The whole gist of the letters is a demand for the employment of the right specialist for the work in hand. The specialist architect required is one who is keenly aware of the social problem and who has had experience of recreating the conditions of a good community. Nothing less than the best architect in the country who is qualified and experienced in this kind of work should direct the rebuilding and re-planning of the Clarendon Street area.

LETTERS

FROM

READERS

"External Appearance"

SIR,—We are surprised to find that in your issue for March 31 Astragal claims ignorance of the fact that when town-planning schemes are fully approved the right of appeal lies to the local bench or special tribunal and not to the Ministry of Health.

We have always held that, from the point of view of external appearance, the designs of qualified architects should be exempt from control. If this is not possible the Act should certainly be amended to retain the right of appeal to the Ministry of Health. We agree that it is little use appealing from one local body to what in effect is another.

SAMUEL AND HARDING

SIR,—The case detailed by Mr. Skinner in your issue for April 14 might be better described as the "Architectural Dreyfus Case," for it was truly a remarkable "affaire."

I myself suffered a similar indignity by the hand of this Council, for, when I submitted to it my own house design on October 24, 1936, I was informed that "the proposed building would seriously disfigure the street by reason of the design thereof," but the same Advisory Committee that was later invited by the Council to consider Mr. Tyrrell's design very graciously approved of the elevations on January 5, 1937, and so eventually the house grew into

SAMUEL AND HARDING

EDWARD BANKS

A HOPEFUL "SPECIAL FINALIST"

G. BRIAN HERBERT

being. But when I took up residence in due course the Council (this time represented by the rating officer) came along and said it considered that the house was ever so good, and that I must pay a higher basic assessment rate than the other houses in the street of 3½d. per foot super more, as it thought my house was an architectural asset.

Can progressive design be commended by one section and condemned by another of the same authority just to suit their respective purposes? Perhaps your readers might decide. But look out, Mr. Tyrrell!

EDWARD BANKS

Professor Reilly Speaking

SIR,—I have read with interest the article by Professor Reilly in the last issue of the JOURNAL.

In the light of experience there are very few people now engaged in the practice of architecture who will not admit that there is much to be said in favour of school training as a method of admission to the profession. I have, however, met schools-trained men who would doubtless make splendid architects if in practice on their own, but as assistants to hard-worked "six per-centers," are hopeless—others again would never make good architects or capable assistants.

However, this will probably be

remedied by a complete revision of present school methods.

The object of this letter is to join issue with the learned Professor on the question of "back-door" methods.

Many of us (born 1904 or thereabouts) had scarcely heard of "Recognized Schools" when we entered the profession.

There are still many who, in spite of "hopes," are unable to enter a school, and therefore, by persistent hard work and study, have qualified by open examination.

I speak for many colleagues when I say that the reward is meagre when, after years of hard work, we are told that we have entered the profession by back-door methods. After all, the front door is such a new one! May I remind Professor Reilly that many of the most eminent architects of today entered the profession through the back door. I presume that the Professor went in through the front door.

Finally (I doubt whether you, Mr. Editor, will print this), if entry to the profession by examination is a back-door method, what is admission to the R.I.B.A. via the Licentiate class without examination?

A HOPEFUL "SPECIAL FINALIST."

The Adventure of Building

SIR,—I am at one with Mr. Archard in his regret that "The Adventure of Building" is now out of print.

Architects may have felt bashful at the enthusiasm shown for them by its author; but bashfulness is only engaging at close quarters. The multitude who have never even come near thinking that an architect could be of use to them need an attractiveness more widely spread. And sent in large numbers from local societies I am convinced that copies of something like "The Adventure of Building" would produce considerable results.

G. BRIAN HERBERT

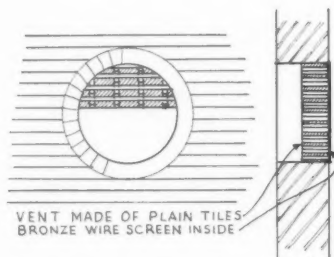
[If other architects, and particularly councils of local societies, share Mr. Herbert's opinion, the JOURNAL will be glad to consider a new edition of "The Adventure of Building."—ED. A.J.]

The late Kinton Parkes

We regret to record the death of Mr. Kinton Parkes, a well-known writer on sculpture and author of several novels. For many years he was art critic of this JOURNAL. He was born in 1865 at Aston Manor, Warwickshire, and educated at King Edward VI Grammar School and Birmingham University. He began his literary career in 1888 as editor of *Comus*, and afterwards became art editor of *Igdrasil*. From 1891 to 1911 he was Principal of the Nicholson Institute, Leek, which includes art galleries and an art school. He studied art in the museums and galleries of Great Britain, France, Belgium, Holland, Italy, and most of the other countries of Europe.

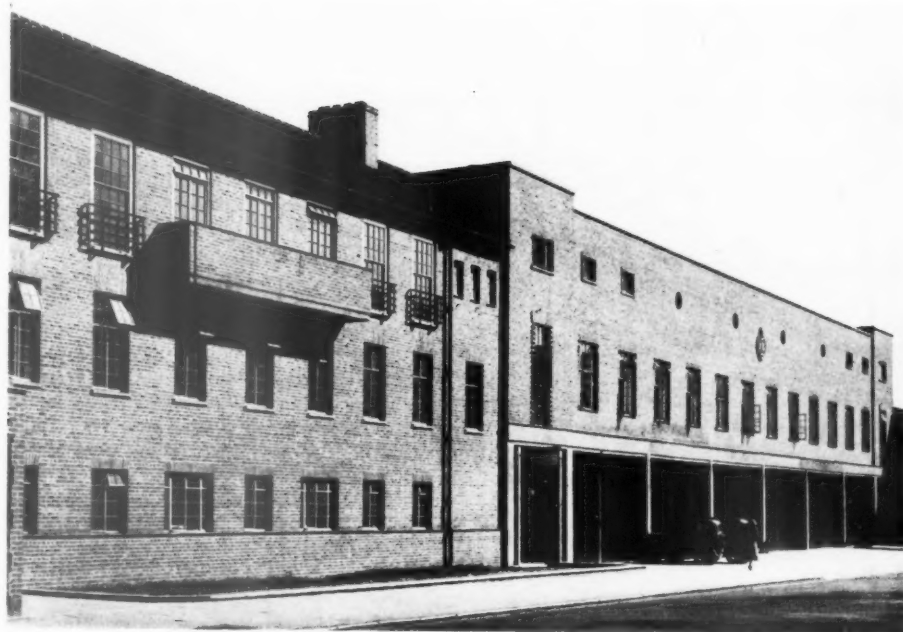
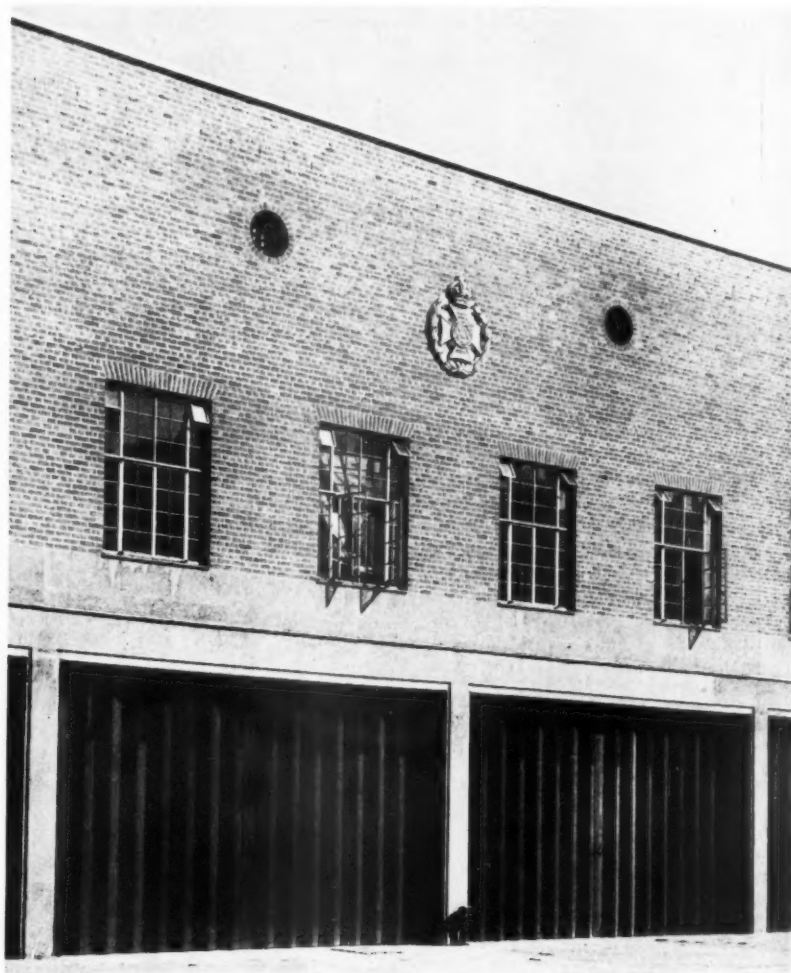
ANTI-AIRCRAFT HEADQUARTERS, ALBANY STREET, N.W.I

BY WILLIAM
G. NEWTON
AND PARTNERS



VENT MADE OF PLAIN TILES
BRONZE WIRE SCREEN INSIDE

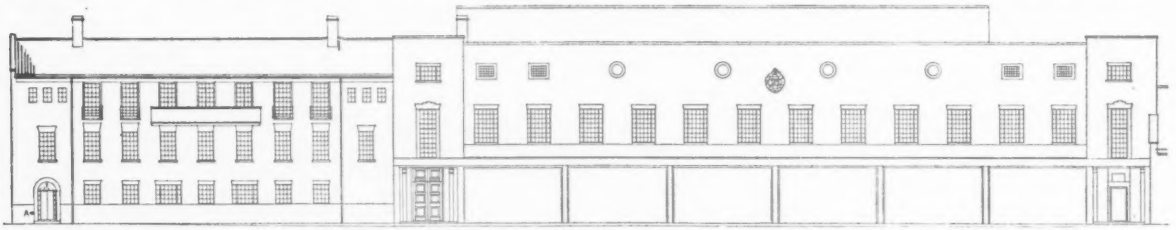
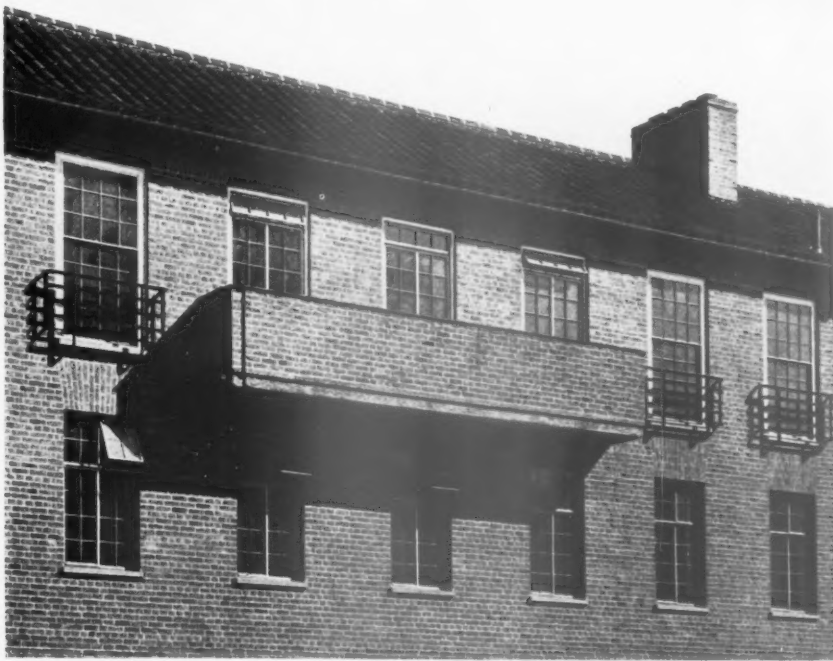
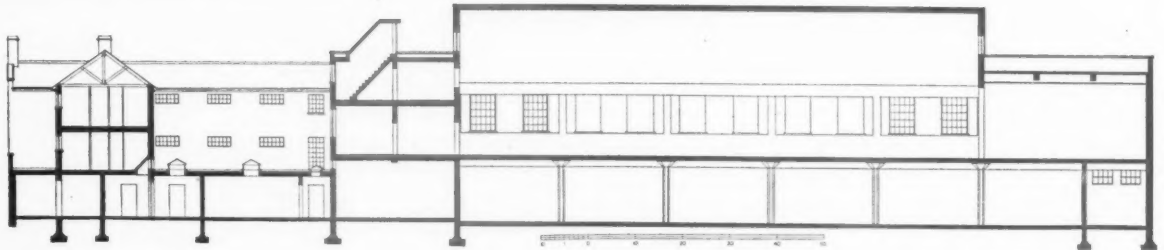
DETAIL OF ONE OF THE
VENTILATION GRILLES



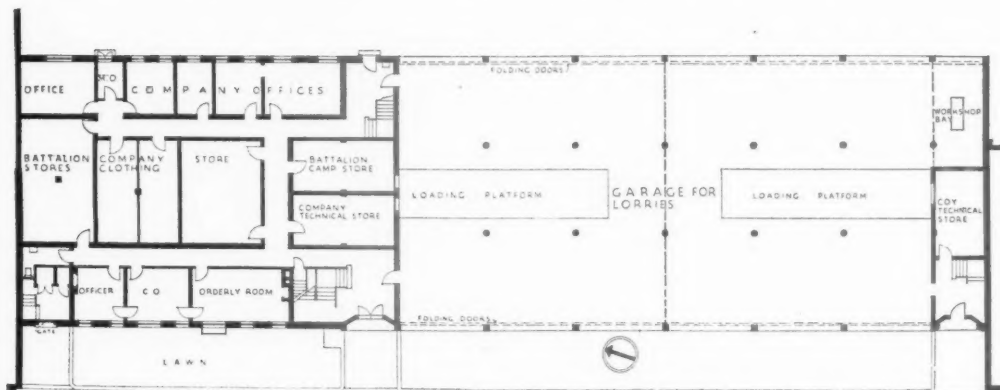
PROBLEM—Headquarters for the 33rd (St. Pancras) A.A. Battalion, Royal Engineers, built for the Territorial Army and Air Force Association of the County of London. The accommodation includes a large garage for lorries; a drill hall, which can also be used for dances and entertainments, and two domestic flats. The building is set back 15 ft. on the Albany Street front to conform with town-planning requirements.

The photographs show: left, the Albany Street front; above, detail of garage doors and, on either side of the regimental badge, one of the ventilation grilles. The construction of the grilles is shown in the accompanying sketch.

ANTI-AIRCRAFT HEADQUARTERS, ALBANY STREET,

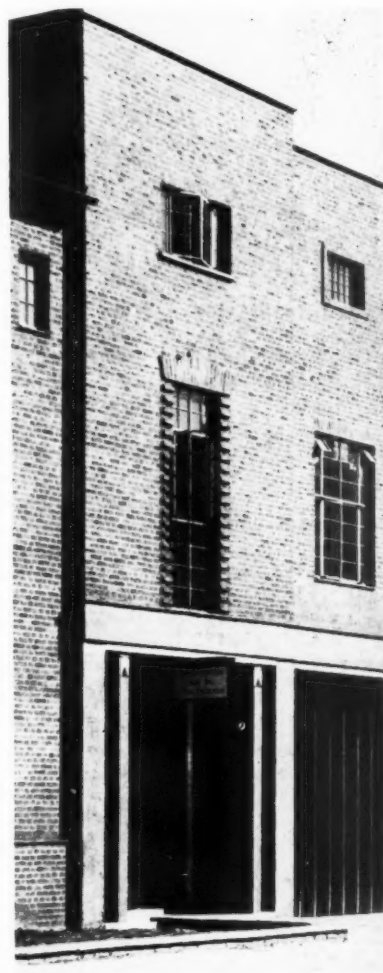
ELEVATION TO
ALBANY STREET*The photograph is of one of the balconies on the Albany Street front.*

SECTION

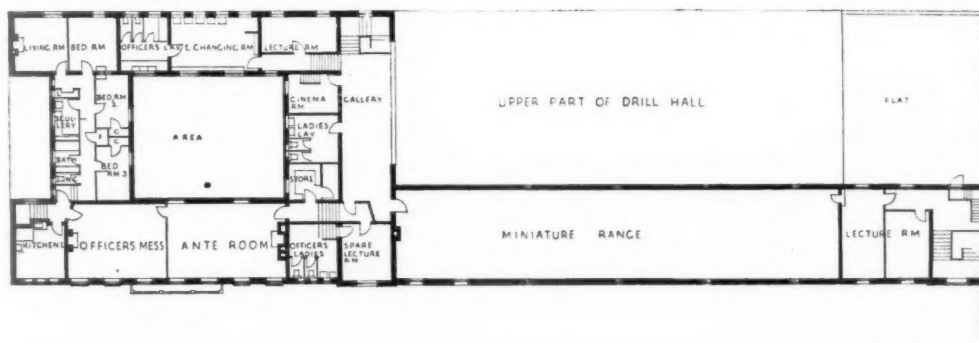
GROUND
FLOOR
PLAN

N.W.I. BY WILLIAM G. NEWTON AND PARTNERS

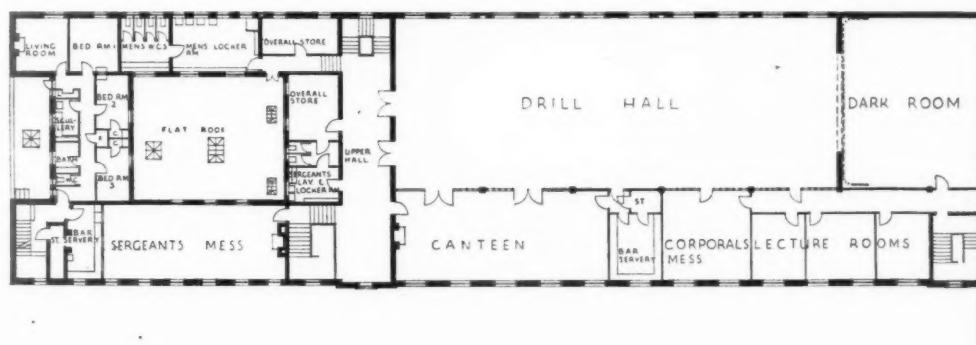
Detail drawing and photograph of the main entrance from Albany Street.



SECOND
FLOOR
PLAN



FIRST
FLOOR
PLAN



ANTI-AIRCRAFT HEADQUARTERS, ALBANY STREET, N.W.I

BY WILLIAM
G. NEWTON
AND PARTNERS

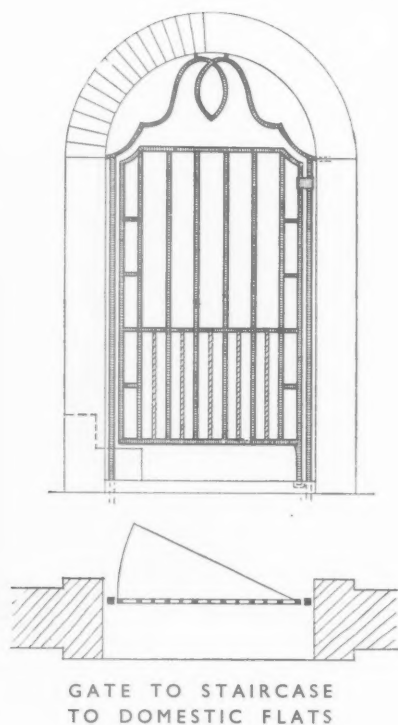
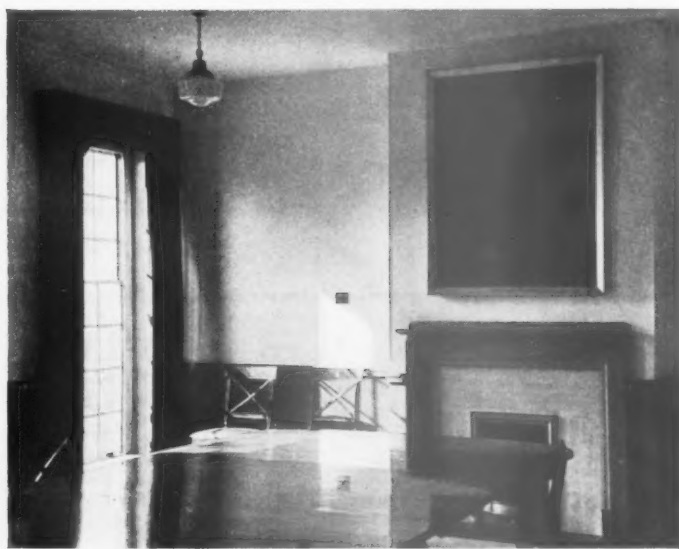


CONSTRUCTION—Floors and garage spans are of reinforced concrete; walls brick, ash brown in colour, with brown York stone coping and cills. The pitched roof is covered with dark Roman tiles.

INTERNAL FINISHES—The interior walls, generally, are finished with cement-colour glazed dados and sand lime bricks above. The drill hall has a dado of flettons facings with white bricks above, and an open steel roof, with unpainted rafters and boarding. The steelwork of the roof and the heating pipes are painted to match the dado. The 120-ft. run of garage doors is painted in five shades of brown, graduated.

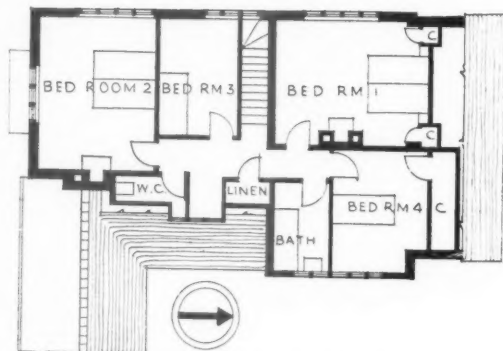
The photographs show: above, the drill hall, looking towards the dark room; below, a corner of the officers' mess; right, the gate from Albany Street leading to the staircase to the domestic flats.

For list of general and sub-contractors, see page 716.

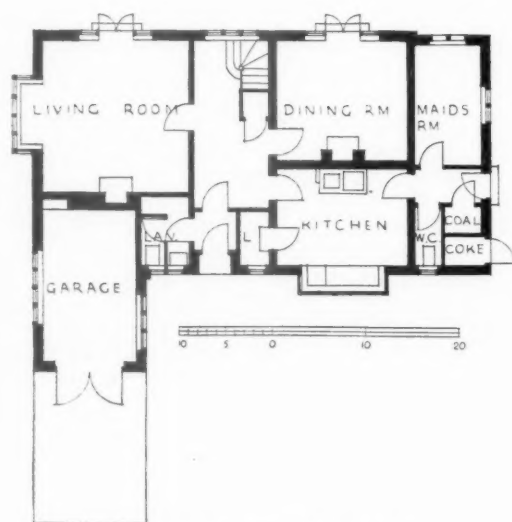


HOUSE AT SHORTLANDS, KENT

DESIGNED
BY TATCHELL
AND WILSON



FIRST FLOOR PLAN



GROUND FLOOR PLAN

GENERAL PROBLEM—To provide economically the accommodation required by the client in a house of brick and tile, to be approved by the Estate Surveyor.

SITE—A narrow irregular plot with an average depth of about 210 ft., the actual road frontage being some 85 ft., but owing to the shape the actual width available for building was only about 50 ft., with a steep bank on the east side. The house, therefore, has been placed well back from the road on the level part of the site and at right angles to the north boundary.

PLAN—Owing to the narrowness of the site the garage has been placed in front of the house with a living room behind which has a south bay window, also windows and door to the garden on the west. As the best views are to be obtained to the west, up the long narrow garden, the dining room also has a west aspect with access to the garden.

On the first floor are four bedrooms with south, west or east aspects.

CONSTRUCTION AND EXTERNAL FINISHES—Brick cavity walls to the ground floor, tile-hung above this level and a tile roof. The elevations are faced with 2½-in. hand-made, sand-faced multi-coloured bricks with a wide cream flush joint. The windows are metal lead-light casements in wood frames.

INTERNAL FINISHES—Internally, hardwood flush doors have been employed, the remainder of the joinery is painted and the walls and ceilings distempered.

The ground floors are in hardwood blocks and the walls of the kitchen and offices are tiled.

The photographs show : above, the garden front ; below, the main front.

For list of general and sub-contractors, see page 716.



R. I. B. A.



"London University" was the title of a paper read by Mr. Charles Holden, F.R.I.B.A., at a general meeting of the R.I.B.A., on Monday last. Extracts are printed on this page.

IN the year 1931 the University Court and Senate made their important decision committing me to a life sentence with hard labour. It was, I know, a great honour, and I was very happy in the acceptance—nevertheless, it was not without a tinge of regret that I saw disappearing into the distant future the leisure and repose of retirement from active practice. The site, as you all know, is in the centre of one of the most beautifully laid-out quarters of London, with a rectangular formality liberally sprinkled with green, open spaces, and with just enough accidental irregularity to save the quarter from the monotony of mechanical chess-board patterning.

With the proximity of the British Museum to the south, University College to the north, and the School of Hygiene and Tropical Medicine to the west, there was every promise of the neighbourhood becoming a real centre of learning—a university city—and the importance of the new university group in this setting acquired a new significance.

We were supplied with an Act of Parliament empowering the University to enclose the existing streets and open spaces within the boundaries of the ten and a half acre island site bounded by Montague Place to the south, Malet Street to the west, Byng Place and Gordon Square to the north, and Woburn Square, Upper Montague Street (now Thornhaugh Street) and Russell Square to the east. This orientation, I may say, is only approximately correct.

The Act provided that open spaces within the site were not to be less in area than the open spaces previously existing, but any land given up for road widening was allowed to be considered as part of the open space required by the Act.

A plan accompanied the Act clearly defining the boundaries and the road widening, which had by that time been carried out by the local authorities.

A printed document entitled "University of London, Bloomsbury Site: Instructions Relating to an Architectural Design," contained a full schedule of the accommodation of the eleven units which were included in our instructions. This schedule had been most carefully worked out by Dr. Lanchester, acting in an advisory capacity for the University, and was most helpful in enabling us to get to work on the plan, although we were given a free hand in interpreting the general recommendations included in the schedule.

The eleven units were as follows:—Administration block, University library, University hall, Institute of Historical Research, O.T.C. premises, Courtauld Institute of Art, University Union, Birkbeck College, School of Oriental Studies, School of Slavonic Studies, London Day Training College (now the Institute of Education).

It was also assumed that other units would ultimately be accommodated on the site. Allowance was to be made for a 10 per cent. extension to the administrative block (now called the Senate House) and a 20 per cent. extension to all other units except University Hall. The instructions indicated a desire for an open centre or quadrangle, for a tower, and for a certain order of development of the site having some regard to the value of the properties and the length of leases still to run.

It soon became evident that the provision of adequate and satisfactory means of extension to the several units was to be the controlling factor in the general layout; and the spinal plan was subsequently evolved, at first in the northern half of the site only and finally throughout its whole length.

The Senate House naturally occupied the southern end of the group with a frontage to Montague Place; in this case, owing to the difficulty in allowing for future extension, the building was intended to cover present and future requirements.

University Hall fell very happily into its place on the east-west axis of the Senate House, with an important frontage to Russell Square on the centre of the western side.

In this position University Hall lends itself, together with the Senate House, to the ceremonial functions inseparable from university life.

The central axis of the British Museum was adopted as the central axis for the spine, and the University group thus occupied the middle of the site, leaving the open spaces on the two flanks, that on the west side to Malet Street being about 50 ft. wide, and that to the east to Woburn Square about 90 ft. wide, an arrangement which had the very practical advantage of isolating the University buildings, and thus greatly reducing traffic noises and vibrations.

The architectural possibilities of the plan were almost better than we could have hoped from a plan so simple and direct without any of the tricks of the "grand manner," and an impressive composition of the masses was possible even though the buildings were still incomplete, while the tower took its place naturally on the centre line of Store Street.

The change in the layout now proposed was to group the future buildings around Torrington Square in separate buildings, an arrangement which would permit a change of material and allow a variety in the planning of the several blocks; we hoped also that it would enable us to avoid the expense of piling, which would have been necessary in the continuous spinal plan.

It is hoped that the Russell Square front of University Hall will ultimately be flanked to the north and south by two buildings similar in height and in general treatment, and thus present a formal elevation along the whole of the west side of Russell Square, but as there is a lease which does not expire until A.D. 2012, I shall not then be in active practice! But the existence of this lease will not prevent University Hall going forward in 1939.

For the more important buildings in a large university (unlike most buildings, public or private), a continuity of active life extending over many centuries must be anticipated, and we felt it our duty to make provision for that continuity.

We therefore resorted to a method of construction based upon centuries of experience, for we did not feel that this was an occasion for the admission of any element of doubt as to the performance of the structure. For this reason brick and stone were selected for their known permanence and stability in the construction of the weight-bearing walls and piers. I should mention here that, on sinking four trial holes on the site, water was found standing at a uniform level in a seam of gravel overlying the London clay, the water varying in depth from 1 to 4 ft.

As it was necessary to carry our foundations into the clay, it was considered advisable to drive piles into the London blue clay in order to avoid the risk of settlement should the water be drained away as the result of building operations in the neighbourhood. By this means we were able to keep the pile caps for the most part above the water level.

The floors are of steel girders in pairs spanning from outside wall to outside wall, with the intervening spaces filled with hollow brick tiles separated with concrete ribs cross-reinforced, and of a sufficient strength to carry partition walls and corridor walls in any position that might be required, either now or in the near or distant future; by this means the spaces within the building were capable of infinite

change without disturbance to the main structure, and with little risk of becoming obsolete.

Generally, therefore, it may be said that the supporting walls are the most durable element in the building, while the floors are constructed of materials about which, on the score of insufficient experience, there may be some doubt.

The fact that these latter materials are fully protected from external moisture will no doubt contribute to their longer life, but if failure should occur this would probably be local, and would give warning of failure, and replacement would be possible without the need for demolishing the building.

Let I should be considered a confirmed medievalist I must explain that the tower contains a large steel frame. This was not originally contemplated, but when Mr. Travers Morgan suggested an extensive mass-concrete raft under the whole area of the tower it was felt that advantage might be taken of this to distribute the loading more evenly over the foundations. The frame is in effect a steel cage independent of the outer walls designed to carry the heavy load of books in the book-stacks direct to the foundations.

The "balanced scheme" consists of two large rectangular blocks, each 248 ft. by 166 ft., connected together by the large tower, 210 ft. high, which measures 120 ft. wide at its base.

The southern block, containing the Senate House, has been in occupation for about eighteen months.

The remainder of the balanced scheme is now approaching completion, that to the north of the tower will house the Institute of Education, the School of Slavonic Studies and (later) the Institute of Historical Research. At the fourth-floor level, the spine, the tower and three of the ribs are carried up above the general level, the whole of which space is given up to university library; the fourth rib (not yet built) will permit of future extension for special libraries or other purposes. In addition, the lower part of the tower, with the exception of the ground floor, will be used for library purposes.

NEWS BULLETIN

The Bristol Conference.—The Conference Programme, published this week, promises very well. The first speaker, Mr. J. E. Barton, is Headmaster of Bristol Grammar School; his book on design, *Purpose and Admiration*, is well known to the architectural profession. His paper on "Architecture and the Public To-day" is certain to be informative and witty. To the second subject, "The Public Buildings of a Modern City," Mr. E. Berry Webber, the creator of many civic buildings, will bring experience and authority.

The first informal reception will be at the Red Lodge, an attractive early eighteenth century building, made famous by the hospitality of the Bristol Savage Club. The Lord Mayor's reception will be held in the Art Gallery and the banquet in the Victoria Rooms, which has been recently rebuilt after a fire. The all-day tours will be to the Cotswolds, Dunster and West Somerset, Wells and the Mendips, Bradford-on-Avon and West Wiltshire.

Annual General Meeting.—The annual report is published this week, and will be considered at the annual general meeting on May 9, at 8 p.m.

C.P.R.E.—The annual general meeting of the C.P.R.E. will be held at the R.I.B.A. on Tuesday, May 3, at 3 p.m. The principal speaker will be the Rt. Hon. Sir Philip Sassoon, and Lord Crawford will be in the chair.

Exhibitions.—During 1937 attendances at R.I.B.A. Exhibitions totalled 282,000, an increase of 100,000 over 1936.

"Health, Sport and Fitness" opens early in May at the Mortimer Galleries, Hull.

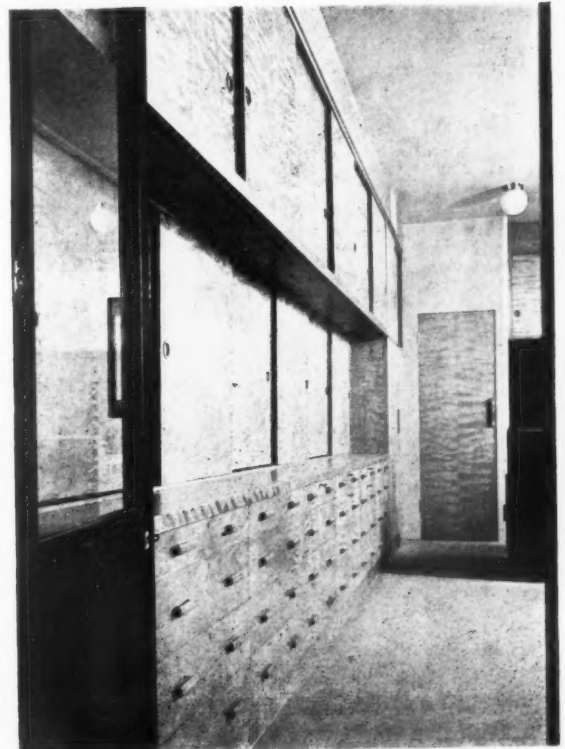
"Civic Centres" on view at the Brighton Museum and Art Gallery until May 8.

"Modern Schools" at the Leicester College of Arts and Crafts until May 12.

"Airports and Airways" opens at the Wolverhampton Municipal Museum and Art Gallery on May 6.

WORKING DETAILS : 649

FILING CABINETS • "PRACTITIONER" OFFICES, BENTINCK ST., W. • STANLEY HALL & EASTON & ROBERTSON

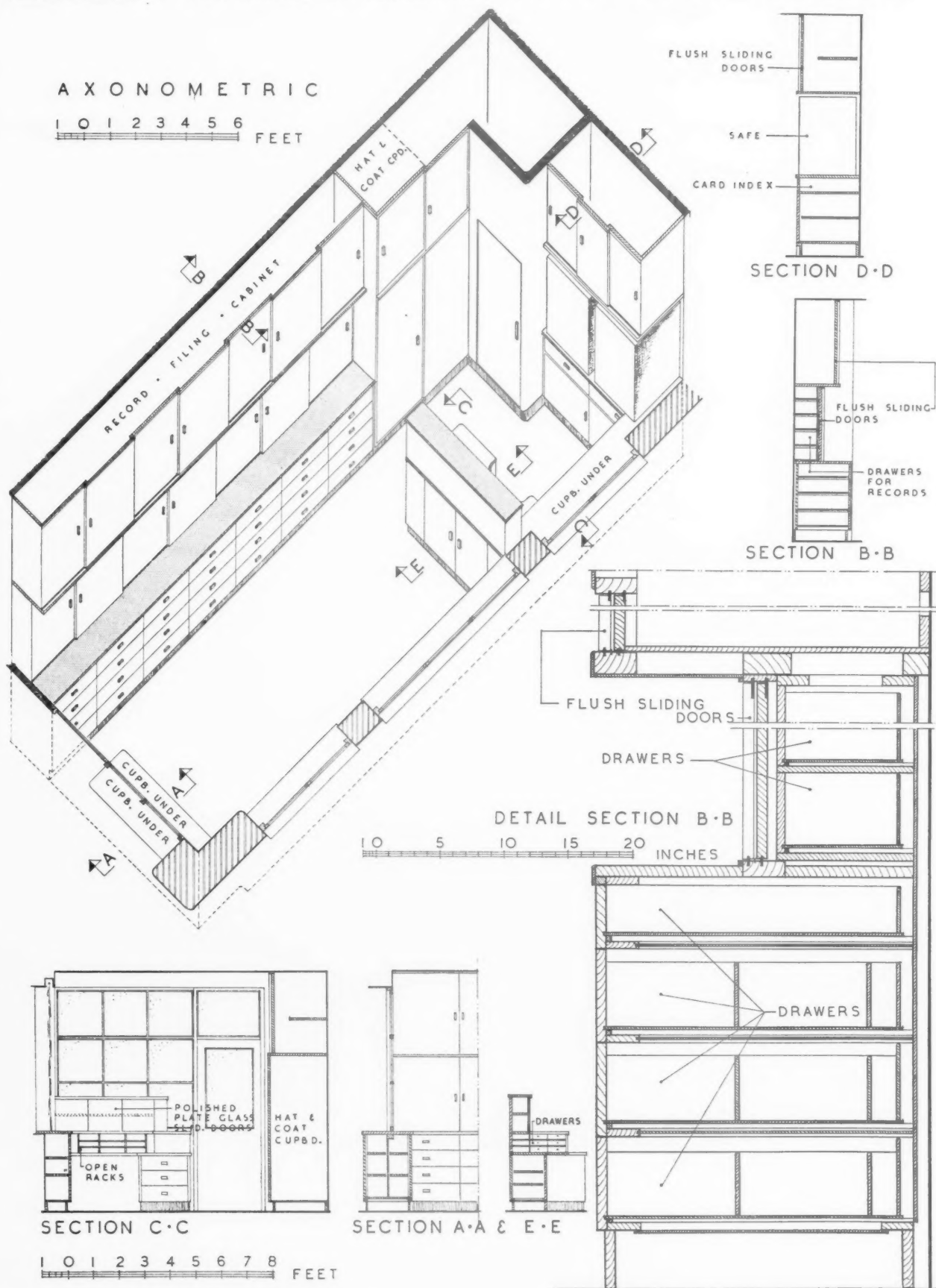


The filing cabinets shown are in the back office on the ground floor of the building, and cover the whole of the wall opposite the windows. The wood used is natural birch, wax polished, which is the wood used throughout the offices.

Overleaf are shown details of the filing cabinets. They are designed in three tiers, the middle tier being recessed to form a shelf over the record drawers in the bottom tier. The top two tiers have flush sliding doors behind which are the smaller filing drawers.

WORKING DETAILS : 650

FILING CABINETS • "PRACTITIONER" OFFICES, BENTINCK ST., W. • STANLEY HALL & EASTON & ROBERTSON



Details of the filing cabinets illustrated overleaf.

The Architects' Journal Library of Planned Information

INFORMATION SHEET SUPPLEMENT

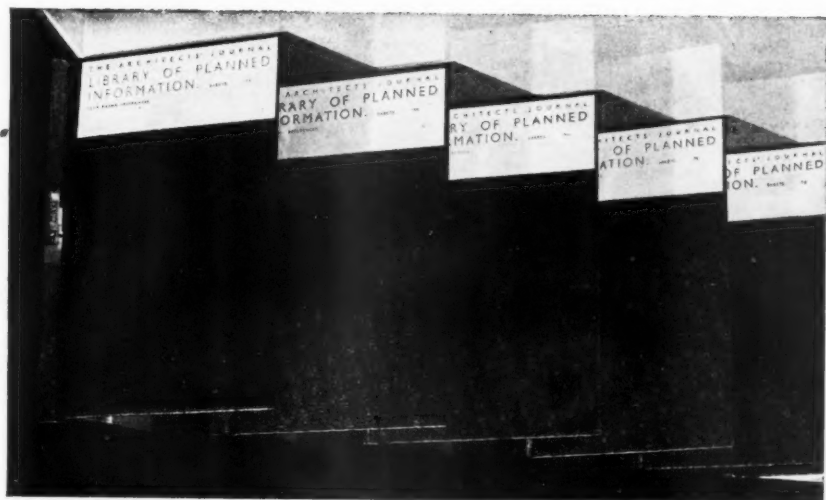


SHEETS IN THIS ISSUE

621 Sanitary Equipment

622 The Insulation of Boiler Bases

In order that readers may preserve their Information Sheets, specially designed loose-leaf binders are available similar to those here illustrated. The covers are of stiff board bound in "Rexine" with patent binding clip. Price 2s. 6d. each post free.



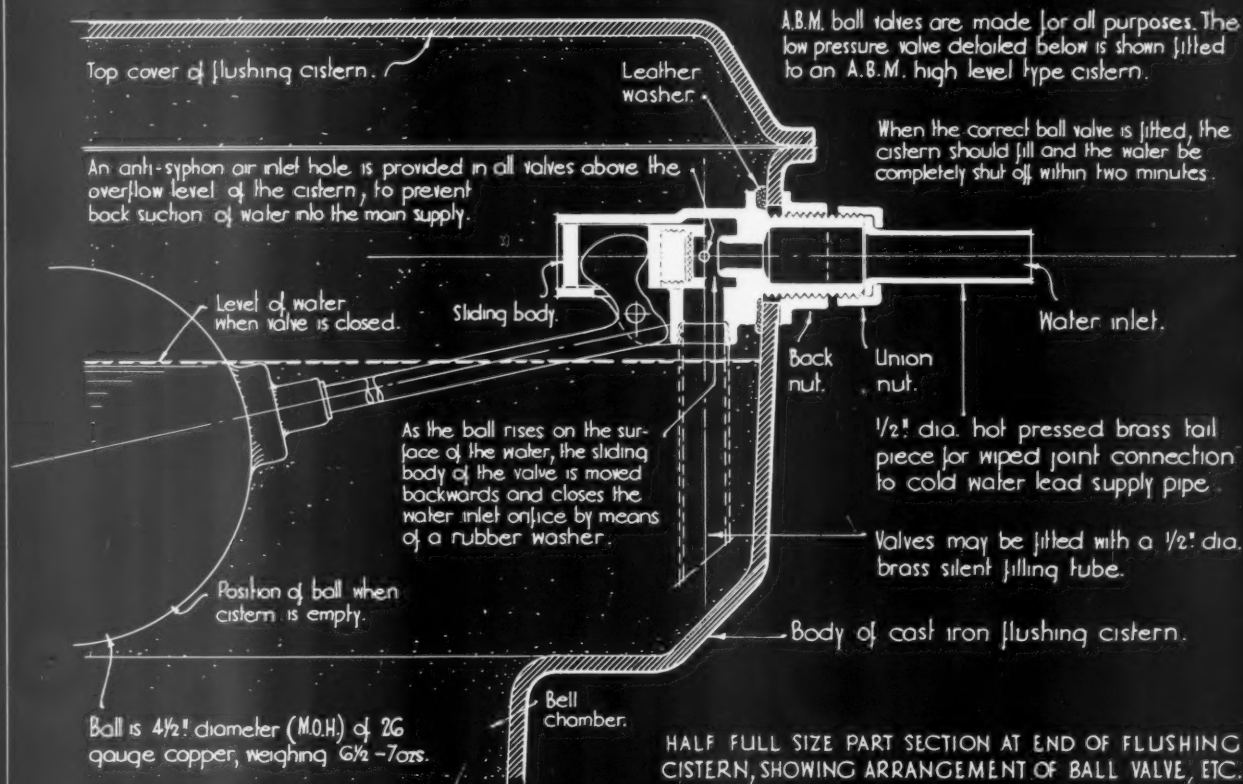
Sheets issued since Index :

- 601 : Sanitary Equipment
- 602 : Enamel Paints
- 603 : Hot Water Boilers—III
- 604 : Gas Cookers
- 605 : Insulation and Protection of Buildings
- 606 : Heating Equipment
- 607 : The Equipment of Buildings
- 608 : Water Heating
- 609 : Fireplaces
- 610 : Weatherings—I
- 611 : Fire Protection and Insulation
- 612 : Glass Masonry
- 613 : Roofing
- 614 : Central Heating
- 615 : Heating : Open Fires
- 616 : External Renderings
- 617 : Kitchen Equipment
- 618 : Roof and Pavement Lights
- 619 : Glass Walls, Windows, Screens, and Partitions
- 620 : Weatherings—II

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

CONSTRUCTION AND TYPES OF A.B.M. HOT PRESSED BRASS BALL VALVES :

All valves are made to Ministry of Health and British Waterworks Association Specifications :



SPECIFYING & FITTING BALL VALVES : It is most important that ball valves (of A.B.M. or any other type) should be specified to suit not only the water pressure, but that they should be fitted in the correct places—failure must occur if a low pressure ball valve is fitted to a high pressure supply or vice versa.

TABLES GIVING TYPES OF BALL VALVES RECOMMENDED FOR DIFFERENT CONDITIONS OF WATER SUPPLY :

(A) FOR FLUSHING CISTERNS, TANKS, ETC. FED BY STORAGE CISTERNS.	HEIGHT OF FALL.	VALVE TO BE USED.
	If the water line of the flushing cistern is 20' or less below that of storage cistern.	A.B.M. FULLWAY valve (marked F.W.), orifice $\frac{3}{8}$ "
	If do. is between 20' and 40'	A.B.M. LOW PRESSURE valve (marked L.P.), orifice $\frac{5}{16}$ "
	If do. is between 40' and 100'	A.B.M. HIGH PRESSURE valve (marked H.P.), orifice $\frac{3}{16}$ "
	If do. is over 100'	A.B.M. EXTRA HIGH PRESSURE valve (marked X.H.P.) orifice $\frac{1}{8}$ "
Type of valve determined by vertical difference between water levels.		
(B) FOR FLUSHING CISTERNS, TANKS, ETC. FED DIRECT FROM WATER MAINS.	MAIN PRESSURE.	VALVE TO BE USED.
	If pressure in the main is 9 lbs. per sq. in. or less.	A.B.M. FULLWAY valve (marked F.W.) orifice $\frac{3}{8}$ "
	If do. is between 9 lbs. & 17 lbs.	A.B.M. LOW PRESSURE valve (marked L.P.) orifice $\frac{5}{16}$ "
	If do. is between 17 lbs. & 44 lbs.	A.B.M. HIGH PRESSURE valve (marked H.P.) orifice $\frac{3}{16}$ "
	If do. is over 44 lbs.	A.B.M. EXTRA HIGH PRESSURE valve (marked X.H.P.) orifice $\frac{1}{8}$ "
Type of valve determined by pressure of mains water in pounds per sq. in.		

Information from Associated Builders' Merchants Limited.

INFORMATION SHEET : BALL VALVES FOR W.C. CISTERNS, TANKS, ETC.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON 'W.C.1' Oscar & Bayne

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 621 •

SANITARY EQUIPMENT

Product : A.B.M. Hot Pressed Brass Ball
Valves

General :

This Sheet illustrates the typical construction and method of fitting hydraulically pressed brass ball valves. Although the valve is shown fitted to a w.c. flushing cistern, the selection of the correct type of valve to suit water supply conditions is equally important for cold water storage tanks and sanitary supply cisterns generally. The valve should be able not only to prevent wastage of water under all pressure conditions, but capable also of complying with the requirements of the many authorities who stipulate a filling time of two minutes for w.c. water waste preventors.

Manufacture :

All valve types are designed in accordance with the Ministry of Health or the British Waterworks Association J.C.S.W.R. standards for ball valves. The ball is pressed hydraulically from brass in a hot ductile condition to obtain a smooth, homogeneous metal free from blow holes.

Construction :

Each valve is complete with back nut, union and $\frac{1}{2}$ in. diameter brass tail piece and copper ball, and, if necessary, with a silent filling tube discharging near the bottom of the cistern or tanks. Efficient sealing of the valve orifice is obtained by means of a rubber washer which is incorporated in the sliding body operated by the pivoted ball arm.

Each valve is provided with a system of anti-syphon air inlets above the level of the overflow, as a safeguard against possible back suction of water into the main supply.

The sectional drawing shows a typical assembly of the valve in an A.B.M. standard high level type water waste preventor, operated by a straight ball arm and an A.B.M. 28-gauge copper ball $4\frac{1}{2}$ ins. in diameter and weighing $6\frac{1}{2}$ to 7 ozs.

Previous Sheets :

Sheets already published dealing with A.B.M. products are Nos. 540, 555, 558, 562, 568, 570, 574, 579, 591, 597, 601, 609, and 615.

Standardised Design :

The Associated Builders' Merchants is a non-trading organization devoted to the standardization of the design of building materials and equipment. Materials and equipment made by a number of manufacturers are stamped with the following symbol indicating that they conform to the standard of design and quality laid down.



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THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

THE INSULATION OF BOILER BASES

by the use of 'Fosalsil' insulating bricks and concrete.

GENERAL RECOMMENDATIONS • A raft composed of insulating concrete of a minimum thickness of 3" should be interposed between the asphalt tanking and the boiler base. This, together with a 3" course of Economite insulating bricks beneath the firebrick, prevents the possibility of heat penetration into the foundations.

MATERIALS •

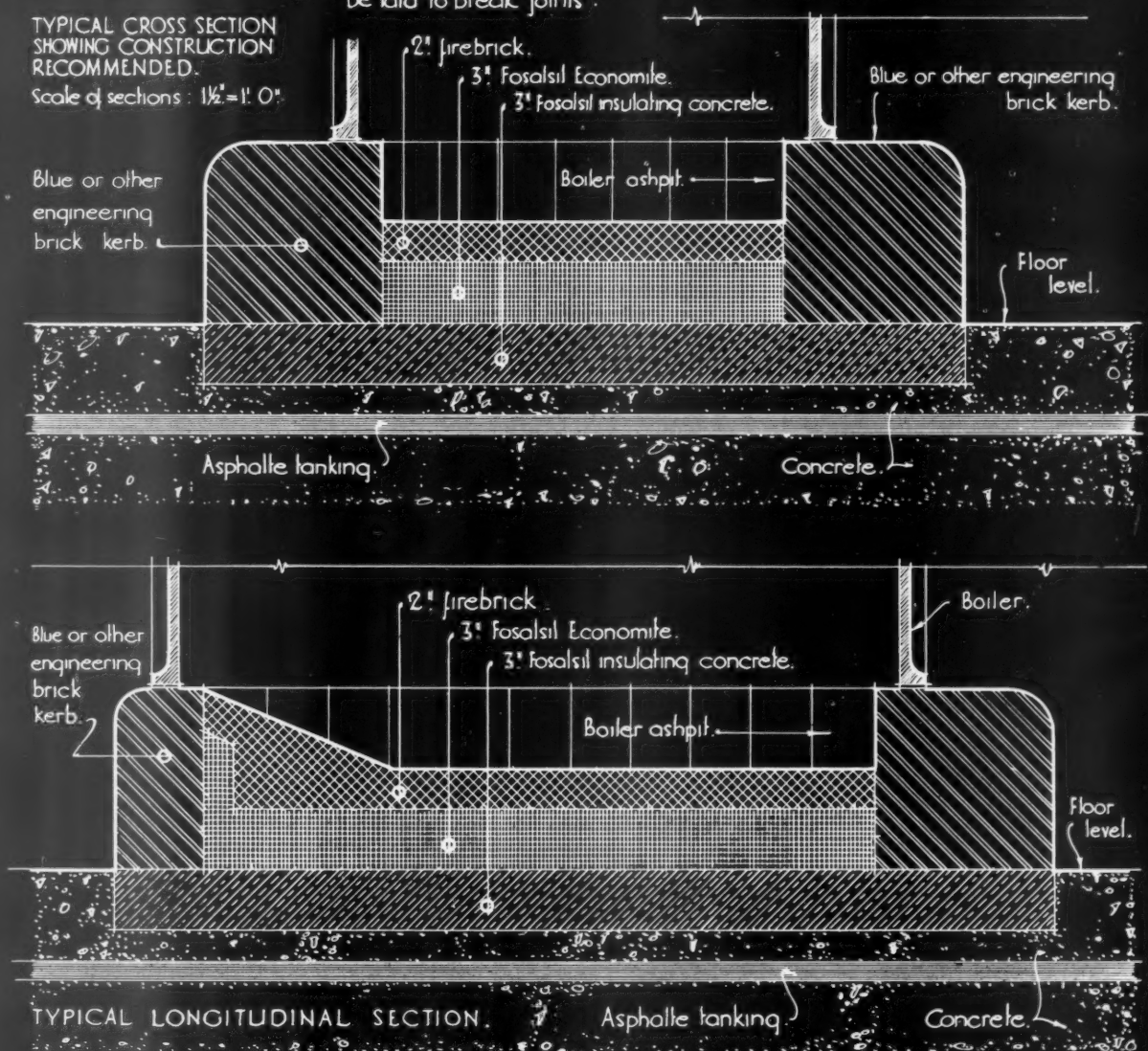
(a) FOSALSIL ECONOMITE BRICKS : a 3" course of Economite insulating bricks between the firebrick & the insulating concrete forms in most cases, an adequate barrier to the passage of heat. If particular circumstances demand a greater thickness, this may be constructed from Economite bricks available in standard thicknesses 1½"-4½", which, if laid in 2 or more courses, should be laid to break joints.

(b) FOSALSIL INSULATING CONCRETE :

This is made from Fosalsil No. 1 insulating aggregate by the addition of Portland or rapid-hardening cement. It is calcined during manufacture and is specially graded to produce maximum structural strength.

TYPICAL CROSS SECTION SHOWING CONSTRUCTION RECOMMENDED.

Scale of sections : 1½" = 1' 0".



Information from Moler Products Ltd.

INFORMATION SHEET : INSULATION OF CENTRAL HEATING BOILER BASES.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI • *Oliver & Boyer*

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 622 •

THE INSULATION OF BOILER BASES

Products : Fosalsil insulating bricks and concrete

General :

On this Sheet is shown the method recommended for insulating the bases of boilers of the central heating type, fired either by oil, gas or solid fuel. The boiler proper usually incorporates insulation as part of the manufacturer's design, and motives of fuel economy, precaution against fire danger, and the safeguarding of the structure, demand that equal protection by insulation should be given to the foundations on which it is to rest.

Effects :

The construction of boiler bases below water level usually necessitates a waterproof tanking membrane within the floors and side walls. Without insulation the heat from the collection of hot ash falling through the firebars into the ashpit passes downwards into the floor by conduction and may cause cracking of the concrete and perishing of the tanking, with consequent infiltration of water. It is to eliminate this passage of heat into boiler foundations, to ensure the maximum life of the tanking and the protection of the concrete floor, that special insulation of the boiler base is undertaken.

Fosalsil Economite Bricks :

These are made in standard sizes :

$$\begin{array}{ll} 9 \times 4\frac{1}{2} \times 1 & 9 \times 4\frac{1}{2} \times 2\frac{1}{2} \\ 9 \times 4\frac{1}{2} \times 2 & 9 \times 4\frac{1}{2} \times 3 \end{array}$$

A double course is preferable to a single course of the same depth, laid to break joint. Thermal conductivity, mean for the range 0° C. to 800° C. :

$$0.84 \text{ B.Th.U./sq. ft./hr./1"}^{\circ}\text{F.}$$

Fosalsil Solid Bricks :

Fosalsil solid grade bricks can be used instead of insulating concrete, or to form the lower half of the kerb. For the latter the solid bricks should be faced with granolithic in front of the ashpit only.

Thermal conductivity, mean for the range 0° C. to 800° C. :

$$0.98 \text{ B.Th.U./sq. ft./hr./1"}^{\circ}\text{F.}$$

Fosalsil Insulating Concrete :

Fosalsil heat insulating concrete is made by mixing Fosalsil No. 1 insulating aggregate and Portland cement in the proportions 4 : 1 by volume. 40 lbs. of No. 1 are required per cubic ft. of space to be filled.

Thermal conductivity, mean for the range 0° C. to 1,000° C. :

$$1.70 \text{ B.Th.U./sq. ft./hr./1"}^{\circ}\text{F.}$$

Jointing Material :

Mortar of similar insulating value and characteristics to the insulating bricks should always be used to achieve a homogeneous insulating structure. Fosalsil No. 6C. mortar is recommended and is supplied ready mixed in $\frac{1}{2}$ -cwt. bags and requires only the addition of water to form a jointing material of great mechanical strength, allied to a high insulation value.

Previous Sheets:

Sheets already published dealing with Moler Products are Nos. 483, 485, 490, 498 and 502.

Manufacturers :

Moler Products, Ltd.

Address :

103 Kingsway, London, W.C.2

Telephones :

Holborn 2931/2, 9543, 5760

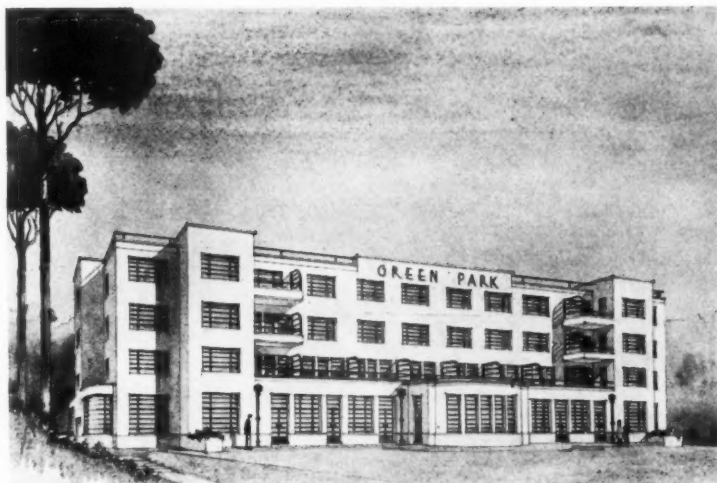
GREEN PARK HOTEL, BOURNEMOUTH

DESIGNED

BY

COLLINS

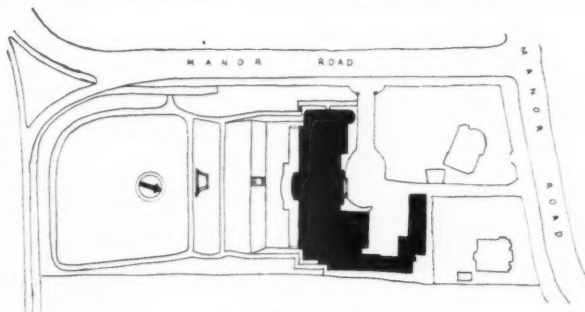
AND GEENS



GENERAL—The hotel is at present of three storeys, but provision has been made for the addition of two more floors in the near future.

SITE—The site of the hotel originally contained a large house with well-wooded gardens overlooking the Solent on Bournemouth's East Cliff. The terraces, lily pond, lawns and gardens have been retained intact and the hotel is built approximately on the site of the old house.

The illustrations show a perspective and photograph of the south elevation.



SITE PLAN



GREEN PARK HOTEL, BOURNEMOUTH

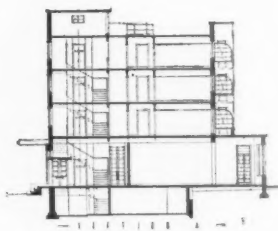
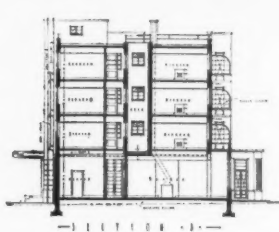


PLAN—The plan form adopted was dictated by the south aspect of the site. All public rooms, with the exception of the ballroom, and 90 per cent. of the bedrooms face south. Several of the bedrooms have balconies. The hotel contains 60 bedrooms, with bathroom, lavatory, luggage store and lobby to each, and provision for a further 40 bedrooms has been allowed for as an early future extension on two further floors. The promoters desired their architects to concentrate on private suites and provision of a bathroom, etc., to every bedroom and also desired complete sound insulation between bedrooms and public corridors. Each of the public rooms is especially large with a view to later increase in bedroom accommodation. They include a dining room, two lounges, card and writing room and a ballroom—the latter to be used as a recreation room. At the east and west extremities of the building are situated the two emergency fire escape staircases and that on the east side is used also as a staff service stairs.

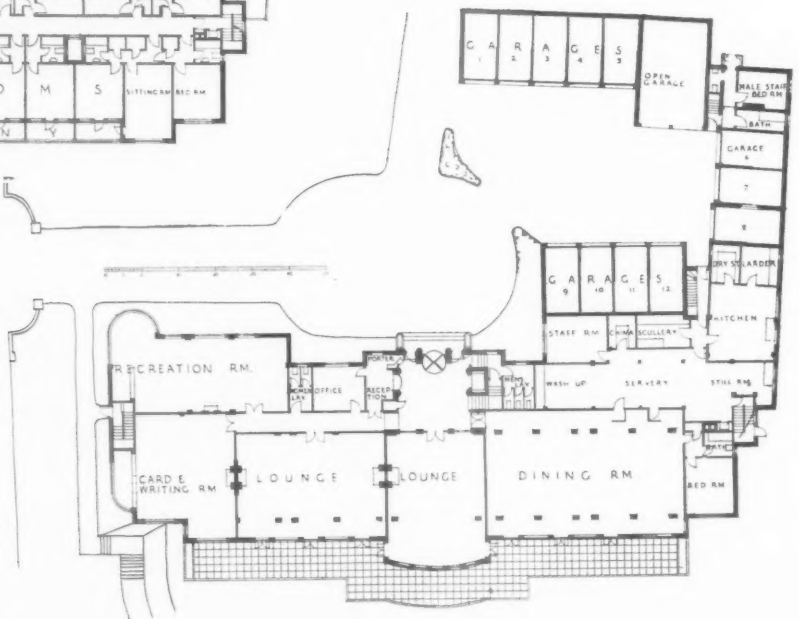
CONSTRUCTION AND EXTERNAL FINISHES—The building is steel framed throughout with cavity brick external walls rendered with cement tinted cream. All internal walls are of brick for sound-proofing and only sub-divisions between stores, wardrobes, etc., are in concrete block partitions. Floors, etc., throughout in hollow tile reinforced concrete construction. Windows are steel casements.

INTERNAL FINISHES—All rooms, public and private, are papered, and ceilings and friezes of the public rooms are covered with the same paper. A consistent scheme of decoration has been carried out through the hotel and practically no variation occurs between bedrooms. Bathrooms are tiled and fitted with mirrors, cabinets, etc. The built-in wardrobes have all flush surfaces similar to the doors and other joinery.

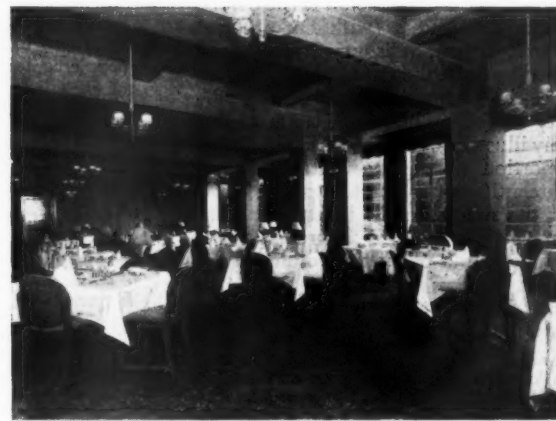
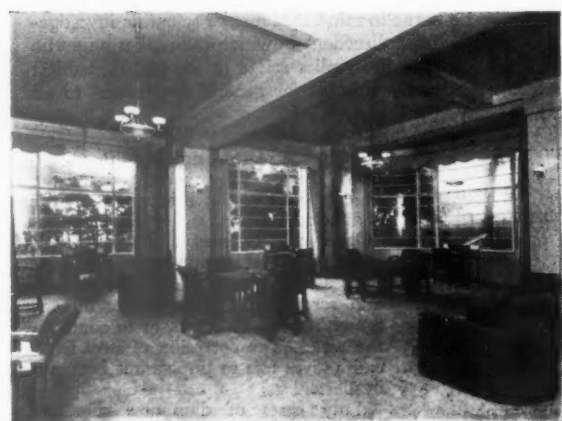
Above is a photograph of the main entrance.



GROUND FLOOR PLAN



DESIGNED BY COLLINS AND GEENS



SERVICES—The hotel is served by one large passenger lift and one small service lift at the east end of the building running up to all floors. Electric fires are fitted to all bedrooms, and the public rooms have coal fires. Telephones are installed in all private suites and bedrooms. Central heating is from coke-fired boilers in the basement fed by automatic stokers. Cooking is by gas.

COST—The demolition of the old house and the erection of the new hotel was under a single contract. The price per

foot cube was approximately 1s. 6d., including heating, ventilating, electrical installation, lifts and decorations ready for occupation, but excluding loose furniture, carpets and curtains. Total cost of building, approximately £27,000.

The photographs show: Left, top, the outer lounge; left, bottom, the card and writing room; right, top, the inner lounge; right, bottom, the dining room.

For list of general and sub-contractors, see page 716.

L I T E R A T U R E

MANSIONS OF THE STRAND

[By HUBERT FITCHEW]

The Strand: Survey of London, Vol. XVIII (Parish of Saint Martin-in-the-Fields, Part II). London County Council, £1 1s.

A READER something over seventy could easily have seen Northumberland House, originally built circa 1605 by the Duke of Northampton and known then as Northampton House, the last of the ducal or episcopal

mansions on the south side of the Strand. It fronted to that thoroughfare where Grand Hotel Buildings now stand and opposite to the Golden Cross Inn, now also gone. Hereabouts in the thirteenth century had existed the Chapel and Hospital of Saint Mary Rounceval.

The other mansions—Hungerford House, York House, Durham Place, etc.—presented merely their stabling and servants' quarters to the Strand; their gardens and main fronts faced the river and from that waterway

they were entered by water-gates or "stairs."

Northumberland House survived to be photographed just before its demolition in 1874. Now, all their magnificence has vanished as if it had never been. Only the York Water Gate remains to quicken the imagination, and even that was not built until 1626, two years after the Duke of Buckingham had taken over York House from the Archbishop of York. Today the Gate rises high and dry 150 yards from the river—a significant reminder, this, of the extent of the reclamations along the waterside since the Strand was what its name implies, a landing-place alongside navigable water.

The Dissolution was the beginning of many changes profoundly affecting the

development of this quarter of London. But in any case by Stuart times the locality had lost its medieval eligibility. Traffic between the City and Westminster had greatly increased. The Strand had become fringed with shops and inns, many built on strips ("rents") of the great estates. As for the river and its mud-banks, they must have become indescribably filthy. An open sewer from houses to the north reached the Thames near Scotland Yard, and was succeeded by the Hartshorn Lane (Northumberland Street) sewer, the sewer water being utilized to turn mills "for raising of Thames Water for the better supplying of the Liberty of Westminster. . . ." Quite close to the York Water Gate the York Buildings Waterworks operated (1690-1731) with a primitive steam-driven pump; the building is illustrated.

Streets—Craven Street, Villiers Street, Buckingham Street (with Duke Street at right angles), Salisbury Street—were driven through the estates, and what we should call "high-class residential property" erected, in which came to live many illustrious professional folk. A fair proportion of these seventeenth- and eighteenth-century buildings still exist, and the many details illustrated from them give a special interest to the architect in this particular volume of the Survey.

And for the antiquarian there are things like this:

No. 12 [Buckingham Street].—Though it has long been known that William Hewer and Samuel Pepys lived at No. 14 Buckingham Street, it is only in the course of preparing this volume that the fact has come to light that they lived at No. 12 for nine years before removing to No. 14.

Pepys, in fact, came to live here after his liberation from the Tower in 1679, until 1688. The house is still in existence, but

with the exception of the staircase and a small wood chimneypiece in the north back room, on the first floor, which has a carved fret frieze, the premises retain little of interest.

To Durham Place ultimately succeeded the Adelphi—a whole world in itself, and a marvellous one, contrived between 1768 and 1774, and only just vanished from our ken.

The architectural design of the Adelphi was a bold one, but the financial side of the scheme was daring even to rashness; no agreement was signed with the freeholder of the property, the Duke of Saint Albans, until 1769, a year after work had been begun on the site; no authority was sought from Parliament for the reclamation of land from the river until 1771; the brothers [Adam] reckoned on securing a return for their expenditure on the arches, the most costly part of the scheme, from the Government who they thought would rent the vaults for Ordnance stores, though they had no kind of guarantee that any such contract would be forthcoming; and finally the cost of the enterprise was greatly under-estimated and proved to be far beyond the resources of the promoters.

The Adelphi, with the Terrace and the Royal Society of Arts building, un-

doubtedly "the most notable individual building," is very fully illustrated; and there are fascinating vignettes of the families and personages who inhabited it—one was the quack doctor, James Graham, with his "Temple of Health" (No. 4 Adelphi Terrace).

In short, valuable as this part is for architect and antiquarian, it is also particularly rich in human interest. Read here, for example, the fate of the Hungerford family, whose "record for dishonesty, vice and violence seems to have been exceptional even in the unsqueamish age in which they flourished. Their family tree, part of

which is given . . . may perhaps provide the eugenicist with a reason for some of their unpleasant characteristics." The Charing Cross Railway Company bought, in 1862, for their station, the site of Hungerford Market (in which Wren was once financially interested). Of its predecessor, Hungerford House, as has been said, no vestige remains. No one knows, or is ever likely to know, quite where it stood or at all what it looked like. The very name is forgotten by all except a few—growing fewer—who call the railway bridge "Hungerford Bridge." Was there a curse upon the Hungerfords?

IN THAT CONTINGENCY

The following are abstracts of inquiries recently submitted to the Building Research Station. The information given in the replies quoted is based on available knowledge. It has to be borne in mind that further scientific investigations may in the course of time indicate directions in which the replies might be supplemented or modified. Moreover, the replies relate to the specific subject of each inquiry and are not necessarily suitable for general application to all similar problems. [Crown Copyright Reserved.]

Dampness in Buildings

Q THIS note concludes the series on dampness in buildings which have appeared in recent issues of the Notes from the Information Bureau.

(5) *Hygroscopicity*

Dampness in buildings may be due to the presence of *hygroscopic* materials incorporated in their structure, i.e. materials which have the property of absorbing moisture from the atmosphere. Dampness due to condensation only occurs when the air in contact with a wall surface is cooled to the dew point, but if hygroscopic substances are present in the wall, liquid films form at a temperature well above the dew point and may persist under atmospheric conditions which are relatively dry. Nevertheless, the amount of moisture deposited in this way is greater the more humid the atmosphere, and for this reason dampness due to hygroscopicity may sometimes be confused with that produced by simple condensation.

The hygroscopic substances which cause trouble in building work are chiefly certain salts. Chlorides of calcium and magnesium and certain nitrates are hygroscopic, and great care should be taken that these salts are not introduced into the structure in any way. Chlorides of calcium and magnesium are constituents of sea water, and it is from this source that trouble chiefly arises. It is recommended that sea water, or sea sand (unless thoroughly washed), should not be used in building work above damp-proof course level.

The great danger with hygroscopic materials is that the solution formed when moisture is absorbed from the air may spread to and contaminate other materials in the vicinity. For instance, if sea sand is used in the plasterwork of a building, the salt may conceivably spread to the brickwork or concrete structure, and while it would be a comparatively simple task

to strip the plaster, nothing short of pulling down the building would remove the salt in cases where the brickwork or concrete is affected.

Other consequences of hygroscopicity include persistent dampness, injury to decorations and corrosion of metals, such as nails and screws, electric light conduit, which are either embedded in, or in contact with, the wall. The corrosion of steel from this cause gives rise to unpleasant brown stains in plaster.

Many cases of dampness due to this cause have been reported to the Building Research Station, including one in which a house had been flooded by sea water and another in which sea water had been used to quench a fire. In both of these cases, even after all water had been removed, the houses found to be watertight against penetration, and thoroughly dried out to prevent conditions conducive to condensation, the dampness persisted due to the hygroscopic properties of the salts which permeated the whole of the structure.

Dampness due to the presence of hygroscopic materials can easily be identified by chemical analysis of the materials which show the dampness; the cure, however, is much more difficult. In cases where dampness is due to hygroscopicity the only remedy which can unreservedly be recommended as being permanent and completely efficacious, is to erect an internal structure or base for decoration out of capillary contact with the contaminated materials. Undoubtedly, in the case of walls, the best method by which this can be accomplished is to plug and batten the walls (all timber being treated with a preservative which will not harm applied decoration) finishing either with plaster-board and plaster or with a wall-board, as suggested previously as a remedy for dampness due either to general penetration or to condensation.

An alternative method, which may be used for local treatment is to cover the

contaminated areas with a lead foil or bituminous paper before decorating in the ordinary way. This, unfortunately, however, accentuates the effects of any condensation on the treated surfaces.

Treating the affected parts of the structure with various chemicals in order to remove the hygroscopicity by changing the chemical nature of the materials causing the trouble, has been suggested, but this method does not appear to offer much prospect of success, and, in view of the possible harmful effect such treatment may have in other directions, cannot be recommended.

The injuries resulting from the presence of hygroscopic substances in the structure of a building are so severe, and the difficulty and expense of a cure so considerable that the greatest care should be taken to see that the materials used are free from contamination. The use of unwashed sea or estuarine sand is perhaps the chief risk to be guarded against.

Nailing of Tiled Roofs

AN architect wrote that "galvanized nails had been used in fixing roof tiles instead of zinc nails as originally specified," and sought advice as to whether the galvanized nails, a sample of which was submitted, would fulfil their purpose as well as zinc. He had been informed that galvanized nails were commonly used in the district and gave satisfactory results.

The question of nailing tiled roofs was considered by the representative committee which drew up the Code for Roof Tiling,* published by the Building Industries' National Council. The code contains the following note with respect to galvanized nails:—

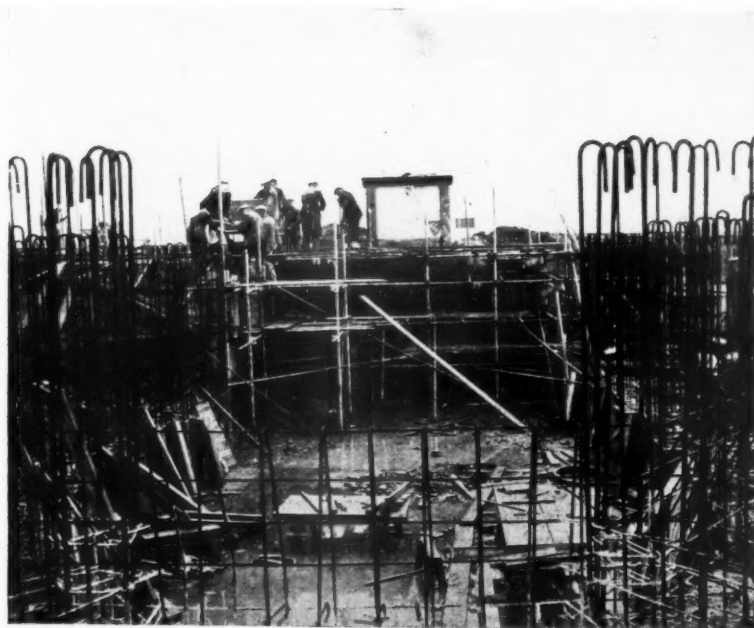
"Galvanized nails must consist of steel or iron coated with zinc by dipping in molten zinc (spelter) at a suitable temperature. Galvanized nails must be not less than 1½ in. long and No. 12 gauge thickness.

Note.—Galvanized nails are adequately durable for use in rural or in urban districts where the atmospheric pollution is not high. In situations where the atmosphere is highly polluted, or on sites near the coast, or in normal sites where a higher degree of durability is demanded, galvanized nails are not suitable."

The nails submitted were actually 1½ in. long and No. 12 gauge thickness. Zinc nails are considered to be more durable than galvanized (yellow metal nails being more durable still). The zinc nails are said, however, not to be suitable for use on sites near the sea coast, and some tile fixers do not like using them as they tend to be rather brittle and are not easy to drive. They are, of course, appreciably more expensive.

From the details given in the letter, considered in conjunction with the recommendations in the code, it would seem that the use of galvanized nails would represent a reasonable standard, and could under the particular conditions be relied upon to give good service.

* Code of Practice for Roof Tiling with Plain Tiles (Building Industries' National Council, May, 1937. Price 9d.).



Photograph showing work in progress on the new Guildford Cathedral.
Architect: Edward Maufe, A.R.A.

Hardening of Concrete

AFIRM of sand and gravel merchants asked for advice as to the possibility of using a concrete bed only three days old, for fixing a new crusher. The machine was urgently required and it was proposed to use a rapid-hardening Portland cement in a mix of 4 cwt. cement to a cubic yard of aggregate consisting of 5 parts gravel to 3 parts of sand.

Under the conditions mentioned it should be possible to use the engine bed safely three days after laying. However, it is advised that the proportion of cement be increased to 5 cwt. per cubic yard of aggregate.

The placing of the concrete should be done in one continuous operation and the consistence of the mixed concrete should be as stiff as possible. The finished bed should be covered with damp sacks or straw, as Portland cement concrete which is kept warm and moist develops strength quickly.

Naturally, a longer period than three days would be preferable in view of the vibration, but it is considered that the concrete would be strong enough in that time.

Lyctus Wood-boring Beetles in Structural Timbers

AN architect writes: A client of mine has just discovered that his English oak staircase is being attacked by one of the wood beetles after having been erected a little over twelve months. The insect found is about ¼ in. long and about ⅛ in. wide, and is of a dark, brownish-black colour, and seems to throw out from the holes a very fine, light, fawn powder. Two of them have been found on the stair-treads.

After a close examination it was noticed that there were grooves on the nosing of one of the treads which may have been on the timber when erected.

Is it certain or possible that the beetles were dormant in or behind these grooves at the time of the erection and have now become active? The attack is active near these grooves, and there are holes some distance away. Fresh ones continue to appear quite distant from the first holes.

What is the best thing to do in such a case?

The following reply was furnished by the Forest Products Research Laboratory, Princes Risborough:—

It is likely that the insect responsible for the damage is one of the *Lyctus* powder-post beetles. It would have been possible to confirm this opinion if samples of the beetles, some of the bore dust, or a small piece of the infested timber had been submitted.

The fact that there are grooves exposed on one of the stair treads suggests that infestation was present in the wood before the staircase was erected. The presumption is that the grooves are actually *Lyctus* tunnels, which though they do not normally occur on the surface, were in the present instance exposed during the working of the wood; and that, though some of the damage may have been removed at this time, further tunnels beneath the surface contained living grubs which later, on maturing, emerge from the wood in the form of adult beetles, specimens of which you are now finding. It should be emphasized that *Lyctus* attacks only the sapwood of certain hardwoods, and that during the early stages of attack there may be no external evidence of activity within the wood. It is not until the first beetle exit holes appear on the surface at least nine to twelve months after the eggs are laid in the

pores that attack is usually first noticed, though, as already stated, tunnels made by young grubs may be exposed when the wood is being worked. Whenever sapwood of susceptible hardwoods is included in furniture, panelling, flooring, etc., there is always the danger of introducing *Lyctus* which may not show its presence until later.

In the present instance it is recommended that any sapwood which has already been reduced to a powdery condition should be removed and replaced with sound well-seasoned timber entirely free from sapwood. The remainder of the sapwood in the staircase should receive repeated brush treatments this summer with an insecticide. There are on the market a number of proprietary preparations suitable for the treatment of insect-infested timber. Several of these substances do not discolour wood or stain plaster, but they have a rather strong smell which may persist for a short time unless plenty of ventilation is given both during and after treatment. Applications should be repeated at intervals until activity, as evidenced by the presence of bore dust on or beneath infested timber, appears to have ceased.

LAW REPORTS

APPEAL FROM AN ARBITRATOR

Geo. Wimpey & Co., Ltd. v. Middlesex County Council.—King's Bench Divisional Court. Before the Lord Chief Justice and Justices Humphreys and Macnaghten.

THIS was an appeal by way of case stated by Mr. Hugh Webster, an official arbitrator under Section 6 (1) of the Acquisition of Land (Assessment of Compensation) Act, 1919.

The claimants, Messrs. Geo. Wimpey & Co., Ltd., builders and contractors, of The Grove, London, W., were the owners of Barn Hill, Wembley, which they intended to develop as a building estate of 362 houses. They had cut a road into it, when in December, 1935, the Middlesex County Council acquired it as an open space. By agreement, notice to treat was assumed, and the builders claimed £79,107 as compensation with interest at 5 per cent., from December, 1935. Adjoining this land was another estate called No. 1, on which Messrs. Wimpey had erected a large number of houses. They claimed as compensation damages for the alleged injurious affection to that land, and among other items loss of profit, viz. £9,000.

The arbitrator held that to some extent No. 1 estate had been injuriously affected because the enclosing of the adjoining land had robbed it of access to a main road, but that on the other hand it had been bettered by being alongside what would be open land.

The question was whether the arbitrator could deduct anything for that betterment or add anything for the injurious affection—the sums in either case being found to be identical—and whether Messrs. Wimpey could recover the profits they would have made had they been allowed to develop the land and build on it.

The Council contended that the only sum payable to the builders was the value of the land together with a sum equal to the expenditure on the land thrown away by

its acquisition, together with the actual amount of damage (if any) caused to No. 1 estate by the severance. The Council repudiated the claim for builders' profits.

The arbitrator found that if the builders were entitled to compensation without deduction for betterment and for loss of builders' profits, including the value of the land and expenditure thrown away, increased overhead charges and damages for severance, the amount should be £60,164.

If there was to be deduction for betterment, but inclusive of the other items, the amount was fixed at £57,744, while, if the builders' profits were not to be allowed, but betterment included, the amount would be £51,164.

Finally, if there was deduction of betterment and no builders' profits, the figure was £48,744.

The questions for the opinion of the court were as follows:—

(a) Whether in the assessment of compensation no account was to be taken for betterment,

(b) Whether there should be deduction for betterment,

(c) Whether the claimants could be awarded builders' profits, and

(d) Whether the compensation should only include the value of the land, expenditure thrown away, the damage for severance and increased overhead charges.

In accordance with rules the court did not give a judgment, but merely answered the questions as follows: (a) and (c) in the negative and (b) and (d) in the affirmative and awarded the Middlesex County Council the costs of the appeal.

POWER TO GRANT EXTENSION OF LEASE

Wiles v. Band and another—Chancery Division. Before Mr. Justice Bennett.

THIS was an action by Mrs. Constance Adelaide Wiles, of Tower Road, Orpington, for possession of the dwelling-house and shop 84 High Street, Orpington, occupied by Mr. William Band and his wife and for mesne profits from March 1, 1937, when the defendants' sub-lease expired.

Mr. and Mrs. Band counter-claimed for specific performance of an option exercised by them to take the premises for a further 17 years. Alternatively, they asked for damages.

Mr. B. L. Bathurst appeared for the plaintiff and Mr. Archibald Safford represented the defendants.

Mr. Bathurst explained to his lordship that the difficulty arose through the fact that the plaintiff was herself a lessee and had no power to carry out what she had contracted to do. She could not perform the option agreement as the head landlords refused their consent and they had the power to determine her lease in December, 1939. Her case was that the defendants knew that she was a lessee and should have examined her title. They must be taken to have constructive notice of the provisions in her head lease and that the option was subject to the power of the landlords to determine her lease. She was willing to perform the contract so far as she could and extend the defendants' sub-tenancy to December, 1939, but she contended that they were not entitled to damages.

Mr. Charles Crockford, estate agent, of Bexley, who let the premises to the

defendants, gave evidence. He said that the plaintiff was a leaseholder. They did not ask to see the head lease. The rent of £175 a year had no bearing on the question of the option. It was a fair rent at the time and was the limit of the value of the premises now.

Mr. Safford contended that the plaintiff was not entitled to possession and that the defendants were entitled to whatever further term of years it was in her power to give them together with damages on the ground that there had been wilful default on her part in not using her best endeavours to obtain the consent of the freeholders.

His lordship, in giving judgment, said that the action to recover possession of the premises must be dismissed with costs. With regard to the counter-claim there had been no wilful default by the plaintiff to get her landlords' consent and therefore, following the decision in *Bain v. Fothergill*, a House of Lords case, the defendants were not entitled to damages. On the rest of the counter-claim the defendants succeeded so far as it was in the power of the plaintiff to give specific performance. The order would be that on the payment of the arrears of rent by the defendants before April 30, the plaintiff would grant them a lease of the premises at the same rent down to December 25, 1939, and the lease would contain a provision that in the event of her landlords not putting an end to her head lease on that date, she would grant the defendants a further lease of 7 years, and if her head lease was not then determined, a still further lease until her head lease expired in December, 1953. He made no order on the costs of the counter-claim.

BREACH OF COVENANT TO REPAIR.

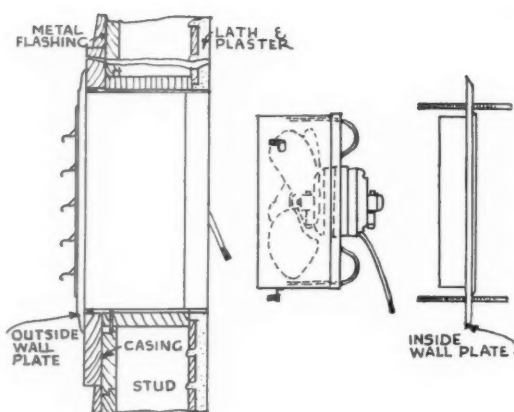
DAMAGES AWARDED

St. Luke's Hospital v. Braithwaite.—Official Referees Court. Before His Honour T. Eastham, K.C.

THIS was a dispute as to the amount of damages to be paid in respect of breach of covenant to repair a house at the end of a lease.

It appeared that the late Mr. Braithwaite was the owner of a house at Woodside Avenue, Hampstead, which he sold to St. Luke's Hospital for £7,500. They then granted him a lease, which contained the usual covenant to repair at the end of the lease. That lease had become vested in Mrs. Braithwaite. Five days before the termination of the lease plaintiffs served a notice upon the defendant to carry out the repairs, which they estimated would cost £704, and that amount they now claimed.

The defendant contended that she was entitled to three months' notice in which to do the repairs, and that as the plaintiffs had served the writ before the expiration of that period, they could not succeed in their claim. Further, defendant contended that all the necessary repairs could be carried out for £350 and that the right to do the repairs was vested in her. His honour, after hearing the evidence and legal arguments, said he was of opinion that this was a clear case of breach of covenant to yield up premises in repair at the termination of the lease. Evidence had been given that the diminution of the value of the reversion was £700, but he came to the conclusion that the proper sum to award was £650. He gave judgment for plaintiffs for £650.



TRADE NOTES

[BY PHILIP SCHOLBERG]

Ventilating Fans

THE Hotpoint people have just introduced a small ventilating fan for use in the private house or flat—much on the same lines as the Vent Axia, the Crittall and the Ilg, all of which have already been described in these notes, though the Crittall is not, so far as I know, produced as a built-in model. The Hotpoint effort claims a slightly greater delivery than some of the other makes, 500 cubic feet a minute, so that smells of cooking should not stay long in the kitchen. The amount of noise produced is very reasonable; no fan of course is really noiseless, but this one is not noisy enough to be a nuisance, and one does not hear it at all after it has been on for a few minutes. More than this one cannot expect. The fan is made up of three different units, an outer frame carrying stainless steel shutters, this being combined with a welded steel wall box which is made telescopic so that the unit is suitable for any thickness of wall from $5\frac{1}{2}$ to 11 inches. The motor and fan are a separate unit mounted on flexible supports which help to absorb vibrations and thus make for quietness. After this unit is assembled in the wall casing the inside chromium-finished plate is fixed by long screws. The sections at the head of these notes show the general arrangement. Control is by a pull cord from inside the room, the motor opening the outside shutters as soon as it is started; there is also a separate control to fix the shutters by hand.

Price is 11 guineas for A.C. supplies, D.C. working out at one guinea more. A fairly high price, but it should be realized that this unit is somewhat larger than the others on the market, and a good deal of trouble has been taken to keep the interior free from corrosion, many of the parts being cadmium-plated. Current consumption is 35 watts. — (The Hotpoint Electric Appliance Co., Ltd., 24 Newman Street, London, W.1.)

A Pressed Steel Electric Cooker

A new electric cooker shown at the B.I.F. and at the Ideal Home Exhibition during the last few weeks is made up largely

of steel pressings, the manufacturers being general steel fabricators who have for years been making units for the motor industry as well as a large range of cabinets and shelving and storage bins for industrial use. It is only logical, therefore, that this firm should develop their pressed steel experience when it comes to cooker manufacture. And it looks as though they have turned out a fairly good job: the photograph at the foot of this page gives an idea of the general appearance, which seems good and clean without any unnecessary frills. Yet apart altogether from the question of external design, this cooker really does appear to have some technical features which are worth while, and which have not been put in just to give another pointless refinement for salesmen to chatter about. Safety devices, for instance; as soon as one of the heating units is withdrawn for



The new electric cooker described on this page.

cleaning the live circuit is immediately broken, even if the switches have been left on accidentally. The pilot lights may or may not be essential, but they at least make it less likely for the oven to be turned on and forgotten.

The oven is large enough to take a 25-lb. turkey (if any family is large enough to need such a thing nowadays) and the door is bottom hung and counterbalanced, becoming a convenient shelf unit so that dishes can be easily removed. And a sensibly strong shelf too, not the flimsy sort of thing so often found when pressings are used. The hob equipment, however, seems to be not so good, the larger unit on the right being of the open type with exposed resistance wires which seem to ask for grease to be spilt over them and at the same time look as though they would be extremely difficult to clean. The single heat boiling-plate on the left has a corrugated top and I discovered on the stand at Olympia that special pots and pans with corresponding corrugations were made, but these were apparently not for sale, and it was suggested that any kind of saucepan could be used. A piece of salesmanship for which I can offer no satisfactory explanation. By and large, this cooker looks very good at first glance, but when it is examined with more care two or three snags crop up which make it not such a winner. As the price is distinctly high, £23 12s. 6d., I should be inclined to wait until the manufacturers have remedied their first mistakes. It probably won't be very long. — (Rubery Owen & Co., Ltd., Britannia Works, Coventry.)

A Ready Reckoner for Timber

Now that the L.C.C. has produced some bye-laws for timber construction there are various fairly common practices which will no longer be allowed. Four-by-two ceiling joists over spans of 12 to 14 feet will not get by the surveyor, for unless the joists are adequately suspended from the roof with proper members having proper joints it is necessary to use ceiling joists of nearly the same size as the floor joists. While nobody seems to have been bothering very much about these regulations, Austins of East Ham have persuaded Mr. R. V. Boughton to compile a series of tables, rules and very simple formulae for use where tables would be impracticable or liable to contravene the bye-laws. From the tables it is quite easy to get the sizes of common, valley and hip rafters, purlins, flat roof, floor and ceiling joists, the formulae being mainly confined to trimmer joist data. The sizes given are based on the usual stock sizes of non-graded redwood (deal) as specified in the L.C.C. bye-laws, but the figures are put forward as representing good sound practice for work in all parts of the country. This seems an enterprising thing for Austins to have done, for they are essentially window and joinery people and are therefore not much concerned with the more structural aspects of timber. But call it what you like, propaganda, goodwill or just advertising, the result should be very useful and almost every office would do well to write for a copy. — (Austins of East Ham, Ltd., Barking Road, London, E.6.)

Data about Aluminium

Two recent publications by the British Aluminium Company deal with foundry

practice and finishing processes. While the first booklet is of no great importance to architects, the second is of considerable interest. The information given in it is admittedly designed for the man who does the finishing rather than for the architect who specifies it, and the information therefore consists largely of hints on the proper running speeds for buffing wheels, the grain size of abrasives, the technique of cleaning and anodizing. But there is nothing in the booklet which the architect might not with advantage know; the only information which might have been given is cost—how, for instance, does sand-blasting compare with anodizing or a satin finish? While figures of this kind could only be very approximate, they would none the less have been useful to the designer, who seldom knows as much about techniques as he might.—(*The British Aluminium Company, Ltd., Adelaide House, King William Street, London, E.C.4.*)

Planned Publicity

More and more firms are developing the habit of re-issuing their information sheets in booklet form after they have been published in this JOURNAL. A sensible step, for it ensures that the information has been first of all edited and presented in a form suitable for architects, and it also means that all the sheets of one particular manufacturer are available together in one folder, so that they are easier to use than if they are kept in the somewhat arbitrary order inevitable with publication in a weekly paper. Exactly how far this method of presenting information in a standardized form will go it is difficult to say, but it is obvious that something is needed in this country to correspond with Sweet's catalogue file in America. The JOURNAL's method, evolved with Sir John Burnet, Tait and Lorne, has several advantages over the American method, in which I think the manufacturers are given far too many rights to make a splash with trade marks and non-essential propaganda, with the result that the volumes are bigger than they would have been if all the nonsense had been pruned and the bare bones of information left. It seems possible that the standard for information may have to be modified to suit the needs of some particular industry, but the principle is basically right and its almost universal adoption can only be a matter of time. There will doubtless always be a number of manufacturers who will want to publish booklets dealing thoroughly with one special subject, or an aspect of it, and there is no reason why they should not continue to do so, but some standard form is obviously essential for the day-to-day catalogue work, and there is no valid reason why it should not be the JOURNAL's. The method is already in existence and quite a lot of people are used to working it.

All of which has carried me rather far from the original argument, which is that the lead people have re-issued some 45 sheets, Turners 25, and British Oxygen 16. Sensible publicity of a type which shouldn't get thrown away.

THE BUILDINGS ILLUSTRATED

BARRACKS, ALBANY STREET (pages 695-698). Architects: William G. Newton and Partners. The general contractors were H. King and Son (Peckham), Ltd., and the sub-contractors and suppliers included: Coles Demolition and Excavation, Ltd., demolition; Trussed Concrete Steel Co., Ltd., reinforced concrete; Finnis and Ruault, bricks and tiles; Diagrid Structures, Ltd., structural steel; D. Anderson and Son, Ltd., special roofings; Edward Deane and Beal, Ltd., central heating; Conway & Co., and Matthews, grates; Bell Brothers & Co., Ltd., electric wiring; Joseph Chater and Sons, Ltd., sanitary fittings; Crittall Manufacturing Co., Ltd., casements; Potter Rax Gate Co., Ltd., garage doors; Muroglaze, dados.

HOUSE AT SHORTLANDS, KENT (page 699). Architects: Tatchell and Wilson. The general contractors were T. H. Adamson and Sons, and the sub-contractors and suppliers included: Bratt Colbran, Ltd., fireplaces; Carter & Co., Ltd., wall and floor tiles; Daneshill, Ltd., facing bricks; Horsley, Smith & Co., Ltd., wood block floors; Jacob, White & Co., Ltd., electrical installation; Osler and Faraday, Ltd., electrical fittings; Roberts Adlard & Co., Ltd., tiles; Shanks & Co., Ltd., sanitary fittings; Permutit, water softening; C. E. Welstead, Ltd., metal windows.

GREEN PARK HOTEL, BOURNEMOUTH (pages 709-711). Architects: H. R. Collins and A. E. O. Geens. The general contractors were G. E. and W. R. J. Lambert, who were also responsible for the demolition, excavation and foundations. The sub-contractors and suppliers included: Val de Travers Asphalt Co., Ltd., asphalt; Caxton Floors, Ltd., reinforced concrete and fireproof construction; Kinson Pottery, Ltd., bricks; James Smith, structural steel; Carter & Co., tiles; Baster and Smith, Ltd., glass, casements and window furniture; G. N. Haden and Sons, Ltd., central heating and boilers; Kennedy's, Ltd., stoves, grates, sanitary fittings and mantels; Bournemouth Gas and Water Co., gas fixtures and gas fitting; A. R. Wilson, electric wiring, electric light fixtures, electric bells and neon signs; B. Line & Co., door furniture; G.P.O., telephones; H. Shepherdson, revolving doors; G. E. and W. R. J. Lambert, plaster, decorative plaster and joinery; J. G. Vincent, balcony railings, screens, etc.; John Line and Sons, Ltd., wallpapers; Harvey Nichols, Ltd., and Plummer Roddis, Ltd., furniture; Bennie Lifts, Ltd., lifts.

Manufacturers' Items

Mr. Wilfred E. Redfern, Chairman of the Redfern's Rubber Works, Ltd., in his address to the annual shareholders' meeting, stated that "the steady sales progress of the years 1934, 1935 and 1936 was continued during 1937 and, despite the rapid rise in the prices of raw materials, we had bought so well ahead for our requirements that the percentage of profit was maintained and the certified net profit for the year of £32,168 was an increase of £4,282. With one exception, the increases in sales are spread fairly evenly over the various departments, making it easy to cope with the increased business as it comes. Our engineering staff is continuously making adjustments, renewals and additions to the plant in anticipation of further prospective business, and given a reasonable distribution of business amongst the departments and throughout the year, the productive capacity of the works is about 50 per cent. greater than its present output. During the past year it has been necessary to add to the buildings. We outgrew our offices several years ago and some of the sales staff had to be moved into another

part of the factory. By this extension, however, we are able to reorganise the offices and bring all the office staff into one building again, with the expectation of increased efficiency; it also provides necessary additional warehouse accommodation. In addition to this, new works extensions have afforded increased facilities for roller covering and tank lining in anticipation of continued development in the future. This has become necessary because this department has recently been working near to capacity."

The London and Wales Steel Construction Company, Ltd., is now controlled by the South Durham Group of steel manufacturers, which consists of the South Durham Steel and Iron Company, Ltd., with works at West Hartlepool and Stockton, and the Cargo Fleet Iron Company, Ltd., with works at Middlesbrough and London. We are informed that all structural steel contracts will be dealt with, as hitherto, by a staff of expert designers and erectors.

As foreshadowed by the Chairman in his speech at last year's general meeting, Falk, Stadelmann and Company, Ltd., have introduced, through the Prudential Assurance Company, Ltd., a life assurance and pension scheme, applicable to the staff of the office and warehouse of the parent company and its subsidiaries.

Mr. J. F. Schubeler, M.I.M.E., D.I.E.H., managing director, Sulzer Bros. (London), Ltd., after many years' association with the Sulzer interests, has resigned his seat on the board of the company. Mr. R. M. Atkinson, hitherto of Messrs. Vickers, Ltd., has been appointed to succeed him.

Messrs. Newalls Insulation Company have sent us a copy of a report of a test of the fire resistance of a column protected with moulded asbestos, undertaken at the Fire Testing Station of the Fire Offices' Committee. The report states: "At the request of Messrs. Newalls Insulation Company, a fire resistance test has been carried out at the Fire Testing Station of the Fire Offices' Committee, in accordance with the requirements of the British Standard Definitions for Fire Resistance, etc., of Building Materials and Structures (No. 476-1932) on a rolled steel column protected by moulded asbestos.

"The column, 10 ft. 2 ins. long, was enclosed in moulded asbestos in two layers so arranged to give a protective cover 3 ins. thick. The asbestos was fixed in position by a representative of Messrs. Newalls Insulation Company. Thirteen days after the placing of the insulation was finished the column was tested as prescribed in the Standard Definitions.

"The Definitions classify load bearing columns into one of the following grades:—Grade A—6 hours; Grade B—4 hours; Grade C—2 hours; Grade D—1 hour; Grade E—½ hour, in accordance with the length of time the following condition is satisfied:—That the structure shall remain rigid and not collapse."

"For classification in Grades A, B, and C, the load shall be re-applied 48 hours after the completion of the firing test period.

"The specimen endured the fire test for 4 hours 43 minutes, and both the 4 minute water test, and the reloading test without collapse.

"Therefore the column protected by the moulded asbestos (3 ins. thick) in the manner described in the report, satisfied the conditions for Grade B (4 hours) fire resistance and is classified accordingly."

In the list of contractors for the Municipal Buildings, Chesterfield, published in our issue for April 7, the name of Bull Motors (branch of E. R. and F. Turner) Ltd., was omitted. They supplied the super silent motors.

Copies of the loose supplement containing the labour rates for the principal towns and districts throughout the country can be obtained from the JOURNAL, price 2d. to cover postage.

PRICES

The complete series of prices consists of four sections, one section being published each week in the following order:—

1. Current Market Prices of Materials, Part I.
(published last week).
2. Current Market Prices of Materials, Part II.
3. Current Prices for Measured Work, Part I
4. A.—Current Prices for Measured Work, Part II.
B.—Prices for Approximate Estimates.

On the following pages appears Prices of Materials—Part 2, with the prices, last published on March 31, brought up to date.

Immediately below, Messrs. Davis and Belfield mention the principal changes which have occurred in the last month. Similar notes, and the deductions that may be drawn from them, will be published on this page each month.

NOTES ON PRICE CHANGES

The changes in the prices of this section are marked in the lists, and do not appear to be of any special significance.

Conditions generally remain the same as last month, and the remarks appearing in previous issues still hold good.

O. A. DAVIS, P.A.S.I.

PART 2

Prices vary according to quality and the quantity ordered.

Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit.

CURRENT MARKET PRICES OF MATERIALS

BY DAVIS AND BELFIELD, P.A.S.I.

JOINER

Prices are for standards in one delivery; when less than a standard is required, or special lengths, add £1 per standard

Joinery Timber

		Per standard		Per foot cube	
		£ s. d.		£ s. d.	
3" × 9" Scantling	2nd Archangel ..	41	10 0	5	0½
3" × 9"	3rd ..	30	10 0	3	8½
2" × 9"	2nd ..	47	10 0	5	9½
2" × 9"	3rd ..	31	0 0	3	9½
3" × 8"	2nd ..	33	0 0	4	0
3" × 8"	3rd ..	25	10 0	3	1½
2" × 8"	2nd ..	35	0 0	4	3
2" × 8"	3rd ..	25	10 0	3	1½
3" × 7"	2nd ..	32	0 0	3	10½
3" × 7"	3rd ..	25	0 0	3	0½
2" × 7"	2nd ..	35	0 0	4	3
2" × 7"	3rd ..	25	10 0	3	1½
2" × 6"	u/s ..	25	0 0	3	0½
1½" × 11"	3rd ..	40	0 0	4	10½
1½" × 9"	u/s ..	36	0 0	4	4½
1" × 9"	2nd ..	47	0 0	5	8½
1" × 9"	3rd ..	36	10 0	4	5½
1" × 11"	2nd ..	49	0 0	5	11½
1" × 11"	3rd ..	41	0 0	4	11½
1½" × 9"	2nd ..	47	0 0	5	8½
1½" × 9"	3rd ..	36	10 0	4	5½
1½" × 11"	2nd ..	49	10 0	6	0
1½" × 11"	3rd ..	41	0 0	4	11½

• Items marked thus have risen since March 31st.

JOINER—(continued)

Flooring

		¾"	1"	1½"
Yellow deal, plain edge				
in batten widths ..	per square	20/9	24/6	31/-
Ditto, T. & G. ..	per square	21/3	25/-	31/6
T. & G. rift sawn B.C. ...				
pine in 4" widths ..	per square		32/6	
*T. & G. random grain, ..				
in 4" widths ..	per square		20/-	

Wall Linings

Deal Match Boarding:—

1" × 6" T.G.B. ..	per square	25/-
1" × 4½" T.G.V. ..	per square	24/-
¾" × 6" T.G.B. ..	per square	20/-
¾" × 4½" T.G.V. ..	per square	18/6
¾" × 6" T.G.B. ..	per square	16/9
¾" × 4½" T.G.V. ..	per square	16/-
¾" × 4½" T.G.V. ..	per square	13/3

Asbestos-Cement:—

* ½" Semi-compressed flat building sheets, grey	per yard super	1/3½
* ¾" Ditto ..	per yard super	1/4½
* 1" Ditto ..	per yard super	1/11
* 1" Metal reinforced flat building sheets	per yard super	3/4

Prices are for orders of less than 1 ton.

* Items marked thus have fallen since March 31st.

CURRENT PRICES

JOINER AND STEEL

BY DAVIS AND BELFIELD, P.A.S.I.

AND IRONWORKER

JOINER—(continued)

Wall Boards:—

Asbestos-cement wall board (in sheets 8' 0" x 4' 0" only)	per foot super	-/2½
under 5,000 feet super	per foot super	
Asbestos-cement stipple glazed sheets (in sheets 8' 0" x 4' 0" only)	per yard super	7/6
Ditto, plain white glazed sheets (in sheets 8' 0" x 4' 0" only)	per yard super	8/6
Marble glazed sheets (in sheets 8' 0" x 4' 0" and 4' 0" x 4' 0")	per yard super	7/6
	300 yards.	300-1,000 yards.
	1/10½	1/9
	25-75 yards	150-300 yards
	1/10	1/6
• ½" Fireproof plaster board	per yard super	2/2
• ½" Ditto	per yard super	2/-
Joint tape (approx. 250 feet run)	per roll	1/4
Joint filler	per lb.	-/4

Plywoods:—

	4 m/m	5 m/m	6 m/m	9 m/m	12½ m/m
Birch (A) per square	22/-	26/6	30/-	42/6	45/-
" (B) per square	18/-	19/-	—	—	—
Japanese figured oak (A.A.) per square	33/6	37/-	38/6	65/-	—
Austrian oak, figured one side (A.A.) per square	—	71/6	77/6	99/6	117/6
Australian walnut, finely figured one side (boards 72" x 36") per square	—	—	7½"	8½"	—
Sycamore, figured one side (ditto) per square	—	—	75/-	85/-	—
Honduras mahogany, figured one side (ditto) per square	—	—	75/-	—	—
Honduras mahogany, finely figured (boards 84" x 86") per square	—	—	125/-	—	—

Prices are for complete bundles.

Blockboards:—

Alder:—

Thickness	Boards 60" x 183"	Boards 72" x 183"
½"	67/-	73/6
¾"	76/-	83/6
1"	83/3	91/3
1½"	87/3	96/3
2"	100/6	110/6
2½"	122/-	134/-
3"	128/-	140/-
3½"	160/9	169/9

Birch:—

Thickness	Boards 54" x 72"	Boards 60" x 140"
½"	50/3	52/9
¾"	57/3	60/3
1"	63/3	67/-
1½"	68/-	71/3
2"	75/-	77/9

Prices are for complete bundles.

Hardwoods

Joinery Quality.

English oak	per foot cube	15/-
American oak (plain)	per foot cube	10/-
" (quartered)	per foot cube	12/-
Australian Silky Oak (plain)	per foot cube	11/-
" (quartered)	per foot cube	12/6
Walnut, European	per foot cube	18/-
Teak, Rangoon	per foot cube	15/-
" African	per foot cube	12/-

• Items marked thus have risen since March 31st.

JOINER—(continued)

Mahogany, Honduras	per foot cube	14/-
American whitewood	per foot cube	10/-
Birch	per foot cube	8/-
Cedar (aromatic)	per foot cube	16/-
Japanese oak (plain)	per foot cube	11/-
" (quartered)	per foot cube	13/-
Austrian oak (plain)	per foot cube	12/-
" (quartered)	per foot cube	16/-

Sundries

Slaters or sarking felt	per yard run	-/6
Roofing felt	per yard run	-/8
Bituminous hair felt	per roll	33/-
All rolls 25 yards long by 32" wide.		
Cork slabs, 1" thick (3' 0" x 1' 0")	per foot super	-/4½
" 2" thick (3' 0" x 1' 0")	per foot super	-/8
Slagwool	per cwt. (approx.)	12/-
Building paper in rolls of 100 yards, 1-ply, 60" wide (B.I.80 and L.G.I.80)	per roll	67/6
Ditto, 2-ply, 60" wide (B.I.80)	per roll	135/-
Ditto, 2-ply, 60" wide (B.I.20)	per roll	202/6
" Cabots" Quilt:—(Ex Works Twelve roll lots delivered carr. free.)		
Double ply	per roll 42/-	per half roll 23/6
All rolls 28 yards long by 36" wide.		
Cut steel clasp nails, 1" per cwt.	33/6	4" per cwt. 23/6
" floor brads, 2"	22/9	3" per cwt. 21/9
Bright oval wire nails 1"	35/9	4" per cwt. 23/6
Scotch glue	per cwt.	60/-

Floor Clips:—

	£	s.	d.
One leg floor clip	per 1,000	8	8 0
2" short leg floor clip	per 1,000	8	8 0
2" Regular floor clip	per 1,000	8	15 0
3" " "	per 1,000	9	0 0
2" Regular ceiling clip	per 1,000	8	15 0
Single leg ceiling clip (7½")	per 1,000	10	10 0

Special terms for quantities.

STEEL AND IRONWORKER

Steelwork

	£	s.	d.
Basis price for rolled steel joists sections 5" x 3" to 16" x 6", in 10 ft. to 50 ft. lengths	per ton	15	0 0
Extras on above for:—			
9" x 7" Section	per ton	0	5 0
4" x 3", 5" x 2½", 10" x 8", 12" x 8", 14" x 8" and 16" x 8" to 20" x 7½" sections inclusive	per ton	0	10 0
3" x 1½", 3" x 3", 4" x 1½", 4½" x 1½" and 24" x 7½" sections	per ton	1	0 0
Channels, angles and tees	per ton	16	0 0
Mild steel plates	per ton	16	0 0
Screw bolts	per ton	25	0 0

Fabricated Steelwork

	£	s.	d.
Joists cut and fitted	per ton	19	0 0
Stanchions, ordinary sections with riveted caps and bases	per ton	20	0 0
Stanchions, compound	per ton	20	10 0
Girders	per ton	20	0 0
Framed roof trusses, average span	per ton	23	0 0

The above prices are ex mills ordered well in advance of delivery. Prices ex London stock are considerably higher, and definite quotations should be obtained.

Prime Galvanized Corrugated Iron Sheets (Ex London Stocks)

	10 cwt. lots	Less quantity
	£ s. d.	£ s. d.
4 to 9 fts. 18 or 20 gauge, 8/3" corrugations	per ton	21 0 0
10 fts. 18 or 20 gauge, 8/3" corrugations	per ton	21 10 0
4 to 9 fts. 22 or 24 gauge, 8/3" corrugations	per ton	21 10 0
10 fts. 22 or 24 gauge, 8/3" corrugations	per ton	22 0 0
4 to 8 fts. 26 gauge, 8/3" corrugations	per ton	22 15 0
9 fts. 26 gauge, 8/3" corrugations	per ton	23 5 0
10 fts. 26 gauge, 8/3" corrugations	per ton	23 15 0

CURRENT PRICES**PLASTERER, PLUMBER AND**

BY DAVIS AND BELFIELD, P.A.S.I.

INTERNAL PLUMBER**PLASTERER***Plaster and Cement*

	1-ton loads	5-ton loads	
Sirapite (coarse) per ton	70/-	64/-	
" (fine) per ton	78/-	—	
Victorite No. 1 per ton	85/-	78/6	} 6-ton loads
" No. 2 or non sweat per ton	80/-	73/6	
Thistle (browning, haired and pink finish) per ton	70/-	64/-	
Thistle (fine) per ton	78/-	—	
Pink plaster per ton	66/-	—	
White plaster per ton	78/-	—	
Keene's pink per ton	112/6	—	
Keene's white per ton	117/6	—	
Super Carbo per ton	—	47/6	} 4-ton loads
Carbo-setting per ton	—	57/6	
		1 ton upwards	
		£ s. d.	
Cullamix No. 2 cream (rendering mixture) per ton	5	10	0
" No. 3 cream per ton	5	10	0
Snowcrete mixture per ton	5	5	0

Sundries

Sharp washed sand per yard cube	8/-
● Cow hair per cwt.	40/-
Goat's hair per cwt.	55/-
$\frac{1}{8}$ " laths per bundle	2/-
$\frac{1}{4}$ " laths per bundle	2/4½
Expanded metal lathing, 9' 0" x 2' 0"	
$\frac{1}{8}$ " mesh x 26 gauge per yard super	-11
Lath nails (galvanised) $1\frac{1}{4}$ " x 14 gauge per cwt.	44/6
" (bright wire) per cwt.	27/-
	Less than 150 yds. Less than 300 yds. Over 300 yds.
$\frac{1}{8}$ " Plaster board per yard super	1/- -11 -10
$1\frac{1}{2}$ " Galvanized nails per lb.	-5
Scrim cloth in 100-yard rolls per roll	2/3

Wall Tiles

Commercial quality.	
Ivory, white, etc., glazed 6" x 6" x $\frac{1}{4}$ " per yard super	9/9
Angle beads ($1\frac{1}{2}$ " wide) per yard run	1/2½
" " (1" ") per yard run	-10
Rounded edge tiles per yard run	2/6½
Coloured enamelled bright glazed, 6" x 6" x $\frac{1}{4}$ " per yard super	14/8
Angle beads ($1\frac{1}{2}$ " wide) per yard run	1/4½
" " (1" ") per yard run	-11½
Rounded edge tiles per yard run	2/7
Eggshell gloss enamelled, 6" x 6" x $\frac{1}{4}$ " per yard super	15/-
Angle beads ($1\frac{1}{2}$ " wide) per yard run	1/7½
" " (1" ") per yard run	1/0½
Rounded edge tiles per yard run	2/8½

PLUMBER*Lead*

3½ lbs. and upwards milled sheet lead in quantities of 5 cwt. and upwards per cwt.	23/6
Add if cut to sizes per cwt.	3/-
Lead ternary alloy, No. 2 quality extra over sheet lead per cwt.	7/-
● Allowance for old lead delivered to merchant per cwt.	13/9

Cast Iron Rainwater Goods (Painted or Unpainted)

The following prices for rainwater pipes and gutters are subject to 20 per cent. trade discount, and the prices of the fittings are subject to 5 per cent. and 20 per cent. trade discount.

Rainwater Pipes

	2"	2½"	3"	3½"	4"	4½"	5"	6"
Round pipes per yard	2/8½	2/9½	3/7½	4/0½	4/9½	6/1½	7/2½	9/2
Shorts, 2' 0", 3' 0" and 4' 0" extra per yard	-3½	-3½	-3½	-3½	-3½	-5	-5	-5
Bends each	1/9	2/-	2/6	3/-	3/7	5/-	6/6	8/5
Offsets 4½" and 6" projection each	2/2	2/8	3/-	3/5	4/4	6/3	7/6	9/10
Offsets, 9" projection each	2/10	3/2	3/9	4/8	5/7	7/6	8/10	11/2
Branches, single each	2/7	3/1	3/9	4/4	5/3	7/6	8/5	13/1
Shoes each	1/6	1/9	2/-	2/8	3/-	4/4	5/5	7/6

● Items marked thus have risen since March 31st.

PLUMBER—(continued)*Square and rectangular pipes.*

3" x 3" per yard	6/9½
3½" x 3½" per yard	8/4
4" x 2" or 2½" per yard	7/4½
4" x 3" per yard	7/4½
4" x 4" per yard	9/0½
4½" x 3" per yard	8/5½
5" x 3" or 3½" per yard	9/7

Gutters

	3"	3½"	4"	4½"	5"	6"
Half round gutters per yard	1/9½	2/1	2/1	2/2½	2/4½	3/7½
Shorts 2' 0", 3' 0" and 4' 0" extra per yard	-2½	-2½	-2½	-2½	-3½	-3½
Angles and nozzle pieces each	1/5	1/7	1/9	2/-	2/2	3/1
Stop ends each	-5	-5	-7½	-9	-10½	1/-
Ogee gutters per yard	2/1	2/3½	2/4½	2/6	2/9½	3/10½
Straight back and shorts 2' 0", 3' 0" and 4' 0" extra per yard	-2½	-2½	-2½	-2½	-3½	-3½
Angles and nozzle pieces each	1/11	1/11	2/-	2/4	2/8	3/3
Stop ends each	-6	-7½	-9	-10½	1/-	1/3

Mild Steel Rainwater Goods

The following prices should be increased by 10 per cent. and are subject to 7½ per cent. trade discount.

	2"	2½"	3"	3½"	4"
Galvanized round pipes with ears per 6' 0"	2/7½	3/1½	3/9	4/3	4/9
Painted round pipes with ears per 6' 0"	2/7½	3/-	3/4½	3/10½	4/3
Painted or galvanized short lengths with ears, extra each	-6	-6	-6	-6	-6
18 Gauge Gutters.					
Galvanized half round gutters per 6' 0"	2/-	2/3	2/4½	2/9	3/-
Painted half round gutters per 6' 0"	1/6	1/9	2/-	2/3	2/6
Painted or galvanized short lengths extra each	3	3	3	3	3

Asbestos-Cement Rainwater Goods

The following prices are subject to 10 per cent. trade discount.

Rainwater pipes. Prices are for 6' 0" lengths, and 10' 0" lengths in 2", 2½" and 3" diameters. Short lengths up to 2' 0" are charged as one yard. From 2' 0" to 4' 0" charged as 1½ yards. From 4' 0" to 6' 0" charged as 2 yards. Over 6' 0" charged as 10' 0".

Round pipes.	
● 2" per yard run	1/10
● 2½" per yard run	2/0½
● 3" per yard run	2/5½
● 3½" per yard run	2/11½
● 4" per yard run	3/4½
● 4½" per yard run	4/10½
● 5" per yard run	5/9½
● 6" per yard run	7/1½

Gutters.

Short lengths of gutter up to 2' 0" charged as 1 yard; from 2' 0" to 4' 0" as 1½ yards, and over 4' 0" as 2 yards.

	3"	4"	4½"	5"	6"	8"
● Half round gutters per yard run	1/3½	1/6½	1/7½	1/11	2/8	3/3½
● Ogee gutters per yard run	—	1/11	2/0½	2/5½	3/0½	3/11½

INTERNAL PLUMBER

Lead pipe in coils, 5 cwt. and upwards per cwt.	23/-
Lead soil pipe per cwt.	26/-
Add if ribbon marked per cwt.	-3
Lead ternary alloy, No. 2 quality extra over lead pipe per cwt.	7/-
Plumber's solder per cwt.	88/-
Tinman's solder per cwt.	111/-
Drawn lead traps with brass screw eye, 6 lbs.	
S. trap each	1" 1/11 2/4 3/4
P. trap each	1/5 1/7 1/11 2/9
Extra for 3" deep seal each	6 6 6 6

CURRENT PRICES

BY DAVIS AND BELFIELD, P.A.S.I.

INTERNAL PLUMBER

PLUMBER

INTERNAL PLUMBER—(continued)

Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.

Tubes.	$\frac{1}{4}$ "	$\frac{1}{2}$ "	1"	1 $\frac{1}{2}$ "	1 $\frac{3}{4}$ "	2"
Tubes 2 ft. long and over						
Pieces 12" to 23 $\frac{1}{2}$ " long	per ft. -5 $\frac{1}{2}$	-6 $\frac{1}{2}$	-9 $\frac{1}{2}$	1/1	1/4 $\frac{1}{2}$	1/10
Bends	each 1/1	1/5	1/11	2/8	3/4	4/9
Fittings.						
Elbows, square ..	each -11	1/2	1/7 $\frac{1}{2}$	2/7 $\frac{1}{2}$	3/2	5/2
Elbows, round ..	each 1/1	1/3	1/6	2/2	2/7	4/3
Tees	each 1/2	1/5	1/8	2/4	2/10	4/8
Crosses	each 1/3	1/7	1/10	2/6	3/1	5/1
Sockets, plain ..	each 2/9	3/3	4/1	5/6	6/7	10/6
Sockets, diminished	each -4	-5	-6	-8	-10 $\frac{1}{2}$	1/3
Flanges	each -6	-7	-9	1/-	1/4	2/-
Caps	each 1/-	1/2	1/4	1/9	2/-	2/9
Plugs	each -5	-6	-8	1/-	1/3	2/-
	each -4	-5	-6	-8	-10	1/3

Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts:—

	Tubes	Fittings	Flanges
Gas	62 $\frac{1}{2}$ %	53 $\frac{1}{2}$ %	57 $\frac{1}{2}$ %
Water	58 $\frac{1}{2}$ %	50%	52 $\frac{1}{2}$ %
Steam	56 $\frac{1}{2}$ %	46 $\frac{1}{2}$ %	47 $\frac{1}{2}$ %
Galvanized gas ..	53 $\frac{1}{2}$ %	46 $\frac{1}{2}$ %	47 $\frac{1}{2}$ %
" water	48 $\frac{1}{2}$ %	42 $\frac{1}{2}$ %	42 $\frac{1}{2}$ %
" steam	43 $\frac{1}{2}$ %	38 $\frac{1}{2}$ %	37 $\frac{1}{2}$ %

Brasswork. Best Quality

	$\frac{1}{4}$ "	$\frac{1}{2}$ "	1"
Chromium plated screw-down bibcocks, screwed for iron ..	per dozen 34/6	56/3	99/-
Ditto, with screw ferrule ..	per dozen 43/-	67/3	105/6
Ditto, with capstan head lettered, screwed for iron ..	per dozen 40/6	62/3	108/-
Ditto, with screw ferrule ..	per dozen 49/-	73/3	124/6

	Brass Screwdown Stop Cocks with Unions both Ends	Brass Screwdown Stop Cocks with Screwed Ends	Brass Screwdown Stop Cocks with Male and Iron Unions
--	--	--	--

	$\frac{1}{4}$ "	$\frac{1}{2}$ "	1"
$\frac{1}{4}$ "	per dozen 37/6	43/-	35/-
$\frac{1}{2}$ "	per dozen 59/-	65/-	54/-
1"	per dozen 90/-	97/6	84/-
1 $\frac{1}{2}$ "	per dozen 12/9	13/6	12/-
1 $\frac{3}{4}$ "	per dozen 20/6	21/6	19/-
2"	per dozen 39/9	41/3	37/6

	$\frac{1}{4}$ "	$\frac{1}{2}$ "	1"
Portsmouth pattern ball valve for low pressure, screwed for iron ..	each 3/7	5/5	11/3
Ditto, with flynut and union ..	each 4/3	6/3	12/9
High pressure ditto, screwed for iron ..	each 3/7	5/5	11/3
Ditto, with flynut and union ..	each 4/3	6/3	12/9

	2"	2 $\frac{1}{2}$ "	3"	4"
Socket thimble sloping shoulder ..	per dozen 10/-	13/-	15/9	22/3
Flanged ferrule thimble ..	per dozen 7/9	9/-	13/6	16/-

	$\frac{1}{4}$ "	$\frac{1}{2}$ "	1"	1 $\frac{1}{2}$ "	1 $\frac{3}{4}$ "	2"
Union joints for lead and iron ..	per dozen 7/6	10/3	14/-	26/-	42/6	92/-
Single nut short boiler screws ..	per dozen 6/-	9/-	14/3	21/-	33/-	60/-
Double nut boiler screws ..	per dozen 8/3	9/9	15/-	22/6	43/6	69/-

Belfast sink wastes stamped brass with brass plug diameter of outlet 2" per dozen 18/-

Galvanized Mild Steel Open Top Cisterns riveted with internal angle iron at top and corner plates

The following prices are subject to 15% and 20% trade discount:—

	14-gauge	12-gauge	$\frac{1}{4}$ " plate	$\frac{1}{2}$ " plate
50 gallon capacity	each 2 5 11	2 14 5	3 1 7	2 0 8
100 "	each 3 8 9	4 2 11	4 16 9	9 10 8
200 "	each 6 6 9	6 19 5	7 18 3	13 1 0
500 "	each 12 6 0	13 16 1	15 16 3	22 6 9
1,000 "	each —	21 9 4	24 19 5	34 15 4

INTERNAL PLUMBER—(continued)

Galvanized Hot Water Tanks, fitted with handhole cover.

The following prices are subject to 15% and 20% trade discount:—

	16-gauge tested to a pressure of 1 lb. per sq. inch = 1 $\frac{1}{2}$ ft. head of water	14-gauge tested to a pressure of 3 lbs. per sq. inch = 4 $\frac{1}{2}$ ft. head of water	12-gauge tested to a pressure of 7 $\frac{1}{2}$ lbs. per sq. inch = 10 ft. head of water	$\frac{1}{4}$ " plate tested to a pressure of 10 lbs. per sq. inch = 15 ft. head of water
Capacity	£ s. d.	£ s. d.	£ s. d.	£ s. d.
20 gallons	each 2 0 3	2 3 11	2 7 8	2 12 9
40 "	each 3 1 7	3 9 0	3 16 8	3 16 8
60 "	each 4 19 3	5 5 5	7 5 7	8 4 5
80 "	each 5 11 7	6 10 8	7 11 9	8 2 5
100 "	each 6 10 8	7 11 9	8 2 5	8 2 5

Screwed flanges or bosses

	$\frac{1}{8}$ "	$\frac{1}{4}$ "	1"	1 $\frac{1}{2}$ "	1 $\frac{3}{4}$ "	2"	2 $\frac{1}{2}$ "	Extra per flange or boss.
2 $\frac{1}{2}$ "	2/-	2/4	2/11	3/4	3/9	4/8	6/9	
8/4	14/3	16/9	19/3	26/11	30/1	45/1		

Galvanized Hot Water Cylinders, Mild Steel Riveted throughout, without Manhole, with usual number of flanges

The following prices are subject to 15% and 20% trade discount:—

	16-gauge tested to 5 lbs. pressure = 10 ft. head of water	14-gauge tested to 15 lbs. pressure = 30 ft. head of water	12-gauge tested to 20 lbs. pressure = 40 ft. head of water	$\frac{1}{4}$ " plate tested to 25 lbs. pressure = 50 ft. head of water
Capacity	£ s. d.	£ s. d.	£ s. d.	£ s. d.
20 gallons	each 1 18 7	2 2 8	2 8 4	2 15 4
40 "	each 2 10 11	2 16 8	3 6 1	3 15 0
65 "	each 4 8 7	5 1 8	5 15 0	6 11 4
75 "	each 5 1 7	6 10 8	7 11 9	8 2 5
85 "	each 6 10 8	7 11 9	8 2 5	8 2 5
100 "	each 7 11 9	8 2 5	8 2 5	8 2 5

Cast Iron Soil Pipes and Connections, L.C.C. $\frac{1}{16}$ " metal.

The following prices for soil pipes are subject to 20% Trade Discount, and the prices of the fittings are subject to 20% and 5% Trade Discount.

	2"	2 $\frac{1}{2}$ "	3"	3 $\frac{1}{2}$ "	4"	5"	6"
Minimum weights in lbs. per 6' 0" length	24	30	35	41	46	78	92

Pipes coated or uncoated per yard run 3/10 $\frac{1}{2}$ 4/0 $\frac{1}{2}$ 4/5 $\frac{1}{2}$ 5/- 5/8 $\frac{1}{2}$ 11/8 14/0 $\frac{1}{2}$ Double sockets extra each -11 $\frac{1}{2}$ -11 $\frac{1}{2}$ -11 $\frac{1}{2}$ -11 $\frac{1}{2}$ -11 $\frac{1}{2}$ 1/0 $\frac{1}{2}$ 1/0 $\frac{1}{2}$ Short lengths extra 2', 3' and 4' per yard run -3/3 $\frac{1}{2}$ -3/3 $\frac{1}{2}$ -3/3 $\frac{1}{2}$ -3/3 $\frac{1}{2}$ -3/3 $\frac{1}{2}$ -5 -5

Single spigot branch cast on pipe each 4/3 4/5 4/7 4/9 4/11 7/6 9/3

Single socket branch cast on pipe each 10/9 11/- 11/3 11/6 11/9 16/- 19/-

Bends, standard angles each 3/1 3/5 3/9 4/8 5/3 9/4 12/9

Large radius bends each 4/- 4/4 5/- 6/- 7/- 13/- 16/9

Inspection bends raised flange door, 4 gunmetal bolts each 16/1 16/11 17/9 18/8 19/3 31/10 86/6

Swannecks 4 $\frac{1}{2}$ " and 6" projection each 3/9 4/4 5/11 6/10 7/11 14/11 20/1

9" ditto each 5/- 5/7 6/10 7/11 9/4 17/1 22/10

12" ditto each 5/11 6/10 7/11 9/8 10/7 19/1 27/1

Single branch with two sockets. T. pieces. T. pieces diminishing two sockets, inverted two sockets. Parallel branch pieces not exceeding 6" centres. Y pieces. Anti-syphon branches with curved arm. Double branch pieces, three sockets each 5/11 7/- 7/11 9/- 10/3 20/3 27/3

Inspection branch pieces double oval access door, 2 gunmetal screws each 12/11 14/- 14/11 16/6 17/9 29/2 36/2

Long branch pieces each 5/- 6/- 7/3 8/6 9/9 19/- 25/-

BY DAVIS AND BELFIELD, P.A.S.I.

COPPERSMITH AND ZINC WORKER

Hot rolled copper sheeting in 1 cwt. lots, all gauges		
to 24 wire gauge	per lb.	-9½
Copper tube, seamless solid drawn	per lb.	1/0½
Copper wire 10 and 12 gauge	per lb.	-9
Copper nails, 1" and up	per lb.	-10

Compression Type :	$\frac{1}{2}"$	$\frac{3}{4}"$	1"	1 $\frac{1}{4}"$	1 $\frac{1}{2}"$	2"	2 $\frac{1}{2}"$
Straight coupling	each	1 1 $\frac{1}{4}$	1 4 $\frac{3}{4}$	2 0 $\frac{3}{4}$	2/8	3 9 $\frac{3}{4}$	5 7 $\frac{3}{4}$ 14/-
Obtuse elbow	each	1 10 $\frac{1}{4}$	2 2 $\frac{1}{4}$	3/3	4 1 $\frac{1}{4}$	7 1 $\frac{1}{4}$	10 1 $\frac{1}{4}$ —
Tees	.. each	2 1 $\frac{1}{4}$	2 5 $\frac{1}{4}$	4/-	5 9 $\frac{1}{4}$	9/3	13 1 $\frac{1}{4}$ 19/3
Crosses	.. each	3/-	3 4 $\frac{1}{4}$	5 2 $\frac{1}{4}$	6/3 $\frac{1}{4}$	10 11 $\frac{1}{4}$	15/3 20 4 $\frac{1}{4}$
Reducing coupling	each	—	1 4 $\frac{3}{4}$	2 0 $\frac{3}{4}$	2/8	3 9 $\frac{3}{4}$	5 7 $\frac{3}{4}$ 14/-
Bends	.. each	1 7 $\frac{1}{4}$	1 11 $\frac{1}{4}$	2 11	3 8 $\frac{3}{4}$	6 7 $\frac{1}{4}$	9 10 $\frac{3}{4}$ 14/1

	each	-7 $\frac{1}{4}$	-10 $\frac{1}{4}$	13 $\frac{3}{4}$	18 $\frac{1}{2}$	23 $\frac{3}{4}$	34 $\frac{1}{2}$	59
45° elbow	.. each	13 $\frac{3}{4}$	18 $\frac{1}{2}$	24 $\frac{1}{2}$	32	49	71 $\frac{1}{2}$	111
Tees	.. each	15 $\frac{1}{2}$	17 $\frac{3}{4}$	28	311 $\frac{1}{2}$	57 $\frac{1}{4}$	83 $\frac{3}{4}$	128
Crosses	.. each	110 $\frac{1}{4}$	20 $\frac{1}{2}$	34 $\frac{1}{2}$	49	72 $\frac{1}{2}$	106	182 $\frac{1}{2}$
Reducing coupling								

Extras for Polishing 15%; Chromium plating 40%; Nickel plating 27½%

		Quantities of less than 3 cwt.	Quantities of more than 3 cwt.	Quantities of more than 5 cwt.
Sheet zinc, 10 gauge and up per cwt.		32/6	32/-	31/6
			5 sheets and under	12 sheets
8 gauge zinc safe hole perforated sheets, size 8' 0" x 3' 0"	..	per sheet	4/10½	4/1½
7 gauge ditto	..	per sheet	4/4	3/8½
6 gauge ditto	..	per sheet	3/10½	3/4

Sheet Glass cut to size (ordinary glazing quality)

		In squares not exceeding			
		2 ft.	4 ft.	5 ft.	Over 6 ft.
18 oz. clear sheet . .	.. per foot super	-2 $\frac{1}{2}$	-2 $\frac{3}{4}$	-3	-3 $\frac{1}{2}$
24 oz. ditto . .	.. per foot super	-2 $\frac{3}{4}$	-3	-4	-4 $\frac{1}{2}$
32 oz. ditto . .	.. per foot super	-4 $\frac{1}{2}$	-6	-7 $\frac{1}{2}$	-8 $\frac{1}{2}$
Obscured sheet glass net extra		-1 $\frac{1}{2}$	-1 $\frac{3}{4}$	-1 $\frac{1}{2}$	-1 $\frac{3}{4}$
$\frac{1}{8}$ " figured rolled glass, white	per foot super	-6 $\frac{1}{2}$			
$\frac{3}{8}$ " ditto, normal tints	.. per foot super	-9 $\frac{1}{2}$			
Hammered, doubled	rolled, Cathedral				
white . . . .	.. per foot super	-6			
Ditto, normal tints	.. per foot super	-8 $\frac{1}{2}$			

		In squares not exceeding					
		2 ft.	3 ft.	4 ft.	6 ft.	8 ft.	
$\frac{3}{8}$ " thick	.. per foot super	-.9	-.11	1/-	1/2	1/3	
$\frac{1}{4}$ " thick	.. per foot super	-.11	1/-	1/3	1/5	1/7	
		In squares not exceeding					
		12 ft.	20 ft.	45 ft.	65 ft.	90 ft.	100 ft.
$\frac{3}{8}$ " thick	.. per foot super	1/6	1/7	1/9	—	—	—
$\frac{1}{4}$ " thick	.. per foot super	1/10	2/2	2/4	2/8	3/-	3/-

For selected glazing quality add 10 per cent. to the above prices.

Ordinary $\frac{1}{4}$ " Substance		Glazing for Glazing Purposes	Selected Glazing Quality	Silvering Quality
In Plates not exceeding				
1 ft. super	..per foot super	1/-	1/3	1/7
2 "	..per foot super	1/4	1/6	1/10
3 "	..per foot super	1/10	2/1	2/6
4 "	..per foot super	2/6	2/9	3/2
6 "	..per foot super	2/10	3/-	3/6
8 "	..per foot super	2/11	3/4	3/8
12 "	..per foot super	3/1	3/8	3/11
20 "	..per foot super	3/1	3/9	4/1
45 "	..per foot super	3/3	4/-	4/4
65 "	..per foot super	3/7	4/3	4/11

Ordinary 1" Substance	Glazing for Glazing Purposes	Selected Glazing Quality	Silvering Quality
In Plates not exceeding 90 ft. super ..per foot super	3/11	4/8	5/1
100 " ..per foot super	4/-	4/10	5/4
Plates exceeding 100 ft. super or 160 in. long, or 104 in. wide, at higher prices.			

			and including	All plates over
			4 ft. super	4 ft. super
$\frac{1}{8}$ " to $\frac{5}{32}$"	..	.. per foot super	-/2	-/4
$\frac{5}{32}$ " to $\frac{3}{16}$ "	exact	.. per foot super	-/2	-/3
$\frac{3}{16}$"	..	.. per foot super	No extra	-/1 $\frac{1}{8}$
bare	..	.. per foot super	"	-/1 $\frac{3}{8}$
$\frac{1}{4}$ " exact	..	.. per foot super	-/2	-/2
$\frac{1}{4}$ " to $\frac{3}{8}$"	..	.. per foot super	No extra	-/4 $\frac{1}{2}$
$\frac{3}{8}$ " exact	..	.. per foot super	-/2	-/6

	Ordinary Quality on Polished Plate, Thick Drawn Sheet Patent Sheet and Plain Sheet	On Embossed or Decorative Work
12 ft. super or 90 in. long . . per ft. super	9d.	1/4
20 ft. " or 100 in. long per ft. super	10d.	1/4
43 ft. super } or 110 in. long per ft. super	1/-	1/5
50 ft. " }	1/0 $\frac{1}{2}$	1/6
55 ft. " }	1/1	1/6 $\frac{1}{2}$
60 ft. " } or 120 in. long per ft. super	1/1 $\frac{1}{2}$	1/7
65 ft. " }	1/2	1/8
70 ft. " } or 130 in. long per ft. super	1/3	1/9 $\frac{1}{2}$
75 ft. " }	1/4	1/11
80 ft. " } or 140 in. long per ft. super	1/5	2/10 $\frac{1}{2}$
85 ft. " }	1/8	2/5
90 ft. " } or 150 in. long per ft. super	1/11	2/9 $\frac{1}{2}$
95 ft. " }	2/2	3/2
100 ft. " } or 160 in. long per ft. super	2/5	3/8

Silvering bent glass, double or more, according to bend.
For plates over 100 ft. super, add 3d. per ft. super for every 5 ft.
or part of same.

Plates over 160 in. long at special rates.
Stripping for re-silvering, add 8d. per ft. super.

1/4 in. Georgian rough cast	per ft. super	10d.
	In squares not exceeding	
	1 ft.	2 ft.
	3 ft.	4 ft.
1/2 in. Georgian polished plate	per ft. super	2/6
	2 ft.	2/8
	3 ft.	2/10
	4 ft.	3/2
3/4 in. Georgian polished plate	per ft. super	3/8
	2 ft.	3/10
	3 ft.	4/2
	4 ft.	4/6
Supplied in sizes up to 110 in. long and up to 36 in. wide.		

For cutting to allow for wires in adjacent pieces to be "lined up," add 4d. per foot super.

White ceiling distemper	per cwt.	12/6
Washable distemper	per cwt.	60/-
Petrifying liquid	per gallon	4/6
Ready mixed white lead paint (best) 5-cwt.					
lots, in 14 lb. tins	per cwt.	70/-
White enamel	per gallon	25/-
Aluminium paint	per gallon	20/-
Stiff white lead, genuine English stack process,					
1-ton lots, in 1-cwt. kegs	per ton	49/6
Driers	per cwt.	36/-
Linseed oil raw (5-gallon drums)	per gallon	3/1
" boiled	per gallon	3/10
French polish	per gallon	11/6
Knotting	per gallon	16/-
Oil stain	per gallon	12/-
Varnish, oak	per gallon	10/-
" copal	per gallon	16/-
" flat	per gallon	20/-
Turpentine, genuine American 5-gallon lots	per gallon	3/7
Creosote, 1-gallon lots	per gallon	1/4
Putty	per cwt.	12/6
Size	per firkin	3/6
Best English quality gold leaf, 23 carat	per book	2/4½
Extra thick, ditto	per book	3/6

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

ACTON. *Flats, etc.* Plans passed by the Acton Corporation : 40 flats, The Vale and 18 maisonettes, off Avenue Road, Percy Pratt and Blount ; 204 flats, The Vale, Mr. E. A. Stonel.

COULSDON. *Houses.* Plans passed by the Coulsdon U.D.C. : Eight houses, Ridgemount Avenue, H. Bacon and Son, Ltd. ; eight houses, Nutfield Road, Mr. W. H. Gorham.

CROYDON. *Houses.* The Croydon Corporation is to erect 22 houses at The Glade, South Norwood.

CROYDON. *Technical College.* The Croydon Education Committee has approved plans by Mr. Robert Atkinson, F.R.I.B.A., for the erection of a technical college on the Fairfield Estate, at a cost of £250,000.

CROYDON. *Houses, etc.* Plans passed by the Croydon Corporation : 390 houses, Wolsey Crescent, etc., Addington. The First National Housing Trust, Ltd. ; 21 flats, Park Lane, Mr. S. J. Kemp.

PURLEY. *Houses.* Plans passed at Purley : 22 houses, Christchurch Road, etc., J. C. Derby, Ltd.

WANSTEAD. *Houses.* Plans passed by the Wanstead Corporation : 22 houses, Reding Farm Estate, 12 maisonette flats, Chigwell Road ; 32 bungalows, Kensington Drive ; 10 houses, Cranbourne Avenue ; 32 houses, Wensley House Estate, Messrs. Hooker and Rogers.

PROVINCES

ALTRINCHAM. *Houses.* The Altrincham Corporation is to erect 60 houses on the Craven estate at a cost of £25,870.

BARROW-IN-FURNESS. *Houses.* Plans passed by the Barrow-in-Furness Corporation : Ten houses, Belvedere Road, Russell Bros. ; 40 houses, off Friars Lane, Styles and Bates, Ltd.

BIRMINGHAM. *School.* The Birmingham Education Committee has obtained sanction to borrow £34,850 for the erection of an elementary school at Shaldon Brook.

BLAYDON. *Houses.* The Blaydon U.D.C. is to erect 24 houses at Barlow, 50 at Hallgarth and 38 at High Spen at a cost of £38,777.

CONEY HILL. *Houses.* The Gloucester Corporation is to erect 216 houses on the Coney Hill estate, at a cost of £108,400.

DARTFORD. *Houses.* Plans passed by the Dartford Corporation : Seven houses, Wentworth Drive, Mr. T. Pollock ; 19 houses, Marcus Road, H. Strong and R. A. Dann ; nine houses, Wentworth Drive, Mrs. W. I. Urien ; 11 houses, Wentworth Drive, etc., Mr. J. B. Heale.

DENTON. *Houses.* The Denton U.D.C. is to erect 68 houses in Tame Street at a cost of £24,974.

DURHAM. *Houses.* The Durham R.D.C. is to erect 135 houses in various parishes at a cost of £50,888.

GLASGOW. *Fire Station alterations, etc.* The Glasgow Corporation has approved plans by the City Engineer for alterations and extensions at the Springburn Fire Station, at a cost of £11,000.

HATFIELD. *Police Court.* The Herts C.C. is to erect a police court at Hatfield, at a cost of £25,027.

HITCHIN. *Sessions Court.* The Herts C.C. is to erect a petty sessions court at Hitchin, at a cost of £14,730.

I.O.M. *School.* The I.O.M. Education Committee is to erect an elementary school on the Ballakermee Estate, Douglas.

JARROW. *School.* The R.C. authorities are to erect an elementary school for about 480 children in Jarrow.

KENILWORTH. *School.* The Warwickshire Education Committee has acquired a site for an infants' school in School Lane, Kenilworth.

KINGSWINFORD. *School.* The Staffordshire Education Committee is to erect a senior school in Kingswinford at a cost of £29,865.

LEEDS. *Hospital Extension.* The Leeds Corporation is to further modernize St. James Hospital, at a revised estimated cost of £9,000.

LLANELLY. *School.* The Carmarthenshire Education Committee is to erect a girls' county school at Llanelly at a cost of £36,530.

LLANELLY. *Houses.* The Llanelly Corporation is to erect 112 houses on the Lledi Valley estate, at a cost of £76,480.

MANCHESTER. *Cinemas.* Plans passed by the Manchester Corporation : Cinema, Church Street, Newton Heath ; cinema, dance hall and café, Stockport Road, Ardwick.

MANCHESTER. *School Extensions.* The Manchester Education Committee is to enlarge the Moberley Approved School, at a cost of £9,669.

MANSFIELD. *Fire Station.* The Mansfield Corporation has obtained sanction for a loan of £19,090 for the erection of a fire station.

MARCH. *Mental Home.* The Isle of Ely C.C. has approved plans by the county architect for the erection of a mental home at March, at a cost of £42,296.

MIDDLESBROUGH. *Remand Home.* The Middlesbrough Corporation is to erect a remand home at a cost of £14,880.

MORPETH. *School.* The Northumberland Education Committee has obtained sanction to borrow £25,660 for the erection of a senior school at Morpeth.

NEWPORT. *Houses.* The Newport (I.O.W.) Corporation is to erect 30 houses in Nelson Road and Albany Road at a cost of £15,600.

NORTHAM. *Houses.* The Northam and Islandshires R.D.C. is to erect 94 houses in various parishes at a cost of £37,434.

NORWICH. *Cottages.* The Norwich Corporation is to erect staff cottages at the mental hospital, at an estimated cost of £3,180.

RICHMOND. *Houses.* The Richmond (Yorks) Corporation is to erect 56 houses in Reeth Road at a cost of £20,630.

ROSS-ON-WYE. *Houses.* The Ross-on-Wye U.D.C. is to erect 56 houses on the Three Crosses estate, at a cost of £23,304.

SHEFFIELD. *Houses, etc.* Plans passed by the

Sheffield Corporation : Six houses, St. Anthony Road, Mr. C. E. Spooner ; 44 houses, Manor Laithes Road, Mr. M. Bonner ; 25 houses and reading rooms, Bunting Nook, John Eaton's Trustees ; 12 houses, Moorbank Road, T. Roper and Sons, Ltd. ; ten houses, Crowland Road, Oxspring Bros. ; six houses, Fife Street, Mr. A. Cooper ; eight houses, Westwick Road, Mr. R. Jones ; 16 houses, Gleadless Drive, Mr. C. Redmile ; six houses, Norton Park Road, C. H. Leadbeater and Son ; eight houses, Main Avenue, Mr. R. E. Sheard ; 550 houses and 28 flats, Parson Cross Estate, Estates Committee.

SOLIHULL. *School.* The Warwickshire Education Committee has obtained sanction for a loan of £25,731 for the erection of a junior school at Chapel Fields, Solihull.

SPALDING. *School Enlargements.* The Holland (Lincs) Education Committee is to enlarge the Spalding Grammar School, at a cost of £25,713.

ST. HELENS. *Houses.* The St. Helens Corporation is to erect 52 houses on the Greenbank estate, at a cost of £20,972.

STOKE-ON-TRENT. *Houses.* Mr. J. Kelly is to erect 45 houses and 25 bungalows off Kelvin Avenue, Sneyd Green, Stoke-on-Trent.

TYNEMOUTH. *Houses.* Plans passed by the Tynemouth Corporation : 10 houses, Balkwell Avenue, for Messrs. Haswell and Son ; 10 houses, Links Avenue, for Mr. J. R. Wallace ; six houses, Billy Mill Avenue, for Messrs. Cackett and McKellar.

WAKEFIELD. *Houses.* Plans passed by the Wakefield Corporation : 12 houses, Belle Isle Avenue, Duncan Mann and Sons.

WARRINGTON. *Houses.* The Warrington Corporation has obtained sanction to borrow £70,520 for the erection of 200 houses on the Long Lane estate.

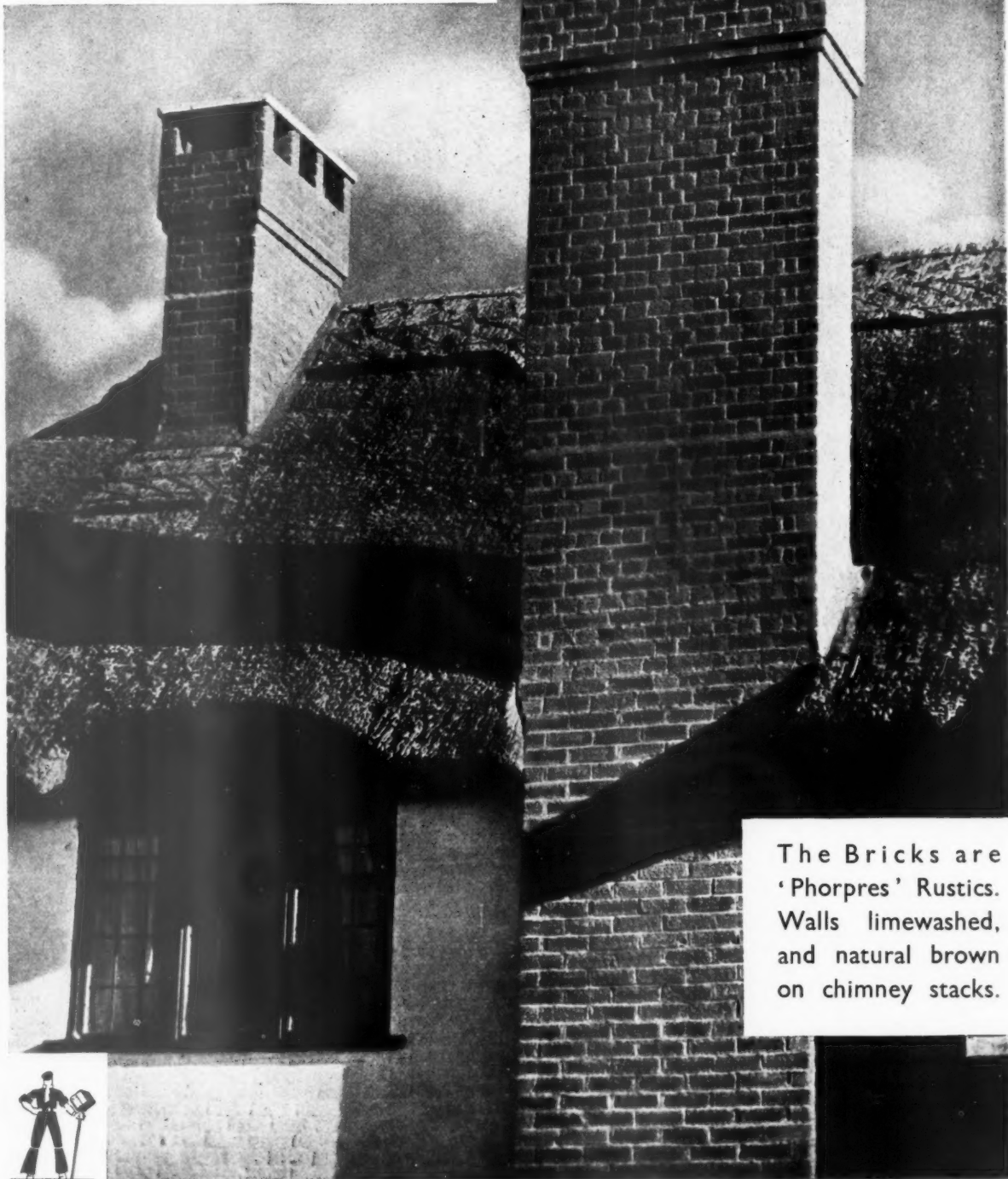
WEST RIDING. *School.* The West Riding Education Committee is to erect a senior school at Darfield at a cost of £34,814.

WEYMOUTH. *Technical School.* The Dorset Education Committee is to erect a technical school at Weymouth, at a cost of £41,018.

Fireplace in the canteen in the barracks in Albany Street, N.W.1, designed by William G. Newton and Partners. See also pages 695-699.



"The Poulett Arms" near Ilminster,
for Messrs. Brutton, Mitchell Toms Ltd.
Architect: E. A. Clarke, F.I.A.A.
Contractor: A. Taylor, Norton-sub-Hamdon.



The Bricks are
'Phorpres' Rustics.
Walls limewashed,
and natural brown
on chimney stacks.



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THE ARCHITECTS'



JOURNAL

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and also illustrations of current architecture in this
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Though every care will be taken, the Editor cannot
hold himself responsible for material sent him.